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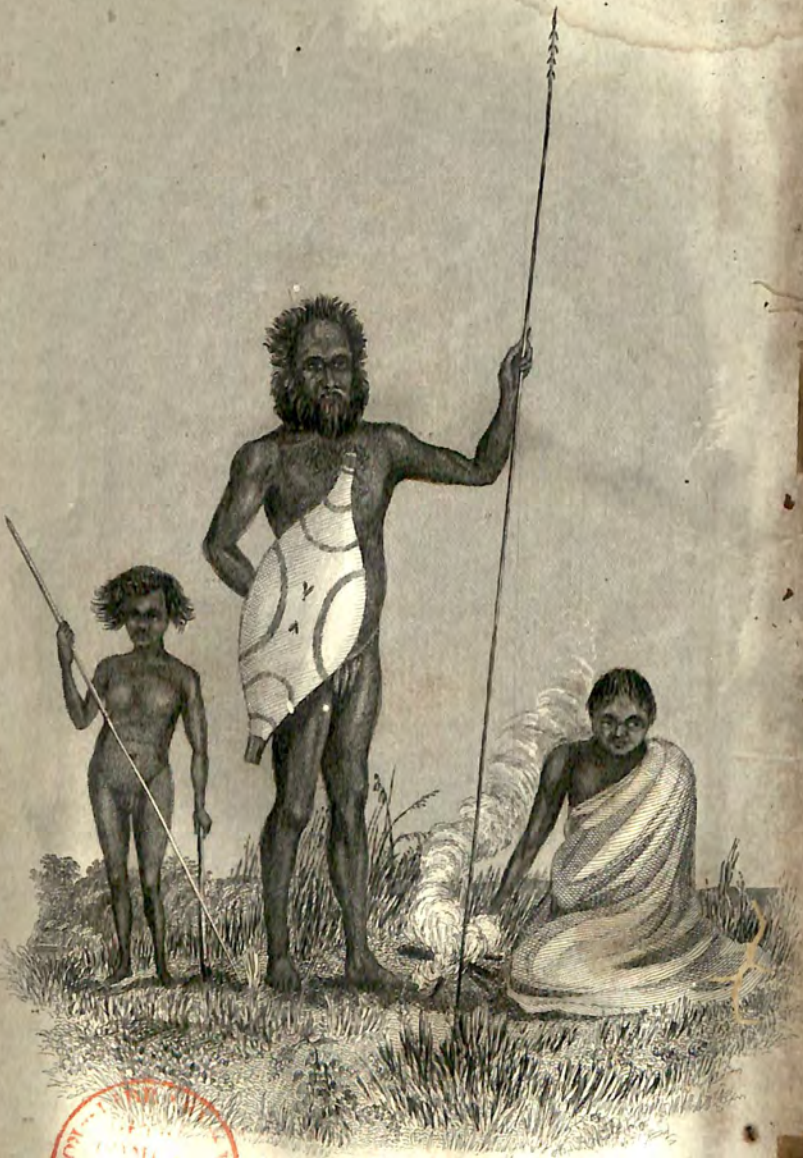

JOURNALS

OF

EXPEDITIONS OF DISCOVERY

INTO

CENTRAL AUSTRALIA,

AND

OVERLAND

FROM ADELAIDE TO KING GEORGE'S SOUND,

IN THE YEARS 1840-1;

SENT BY THE COLONISTS OF SOUTH AUSTRALIA,

With the Sanction and Support of the Government:

INCLUDING AN ACCOUNT OF THE

MANNERS AND CUSTOMS OF THE ABORIGINES

AND THE

STATE OF THEIR RELATIONS WITH EUROPEANS.

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BY EDWARD JOHN EYRE,

RESIDENT MAGISTRATE, MURRAY RIVER.

IN TWO VOLUMES.

VOL. I.

Z. C.

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TO

LIEUT.-COLONEL GEORGE GAWLER,

K.H. M.R.G.S.

UNDER WHOSE AUSPICES,

AS GOVERNOR OF SOUTH AUSTRALIA,

THE EXPEDITIONS,

DESCRIBED IN THE FOLLOWING PAGES,

WERE UNDERTAKEN,

These Volumes are respectfully inscribed,

AS

A TRIBUTE OF GRATITUDE FOR HIS KINDNESS

AND RESPECT FOR HIS VIRTUES,

BY

THE AUTHOR.

PREFACE.

In offering to the public an account of Expeditions of Discovery in Australia, undertaken in the years 1840-1, and completed in July of the latter year, some apology may be deemed necessary for this narrative not having sooner appeared, or perhaps even for its being now published at all.

With respect to the first, the author would remark that soon after his return to South Australia upon the close of the Expeditions, and when contemplating an immediate return to England, he was invited by the Governor of the Colony to remain, and undertake the task of re-establishing peace and amicable relations with the numerous native tribes of the Murray River, and its neighbourhood, whose daring and successful outrages in 1841, had caused very great losses to, and created serious apprehensions among the Colonists.

Hoping that his personal knowledge of and extensive practical experience among the Aborigines might prove serviceable in an employment of this nature, the author consented to undertake it; and from the close of September 1841, until December 1844, was unremittingly occupied with the duties it entailed. It was consequently not in his power

to attend to the publication of his travels earlier, nor indeed can he regret a delay, which by the facilities it afforded him of acquiring a more intimate knowledge of the character and habits of the Aborigines, has enabled him to render that portion of his work which relates to them more comprehensive and satisfactory than it otherwise would have been.

With respect to the second point, or the reasons which have led to this work being published at all, the author would observe that he has been led to engage in it rather from a sense of duty, and at the instance of many of his friends, than from any wish of his own. The greater portion of the country he explored was of so sterile and worthless a description, and the circumstances which an attempt to cross such a desert region led to, were of so distressing a character, that he would not willingly have revived associations, so unsatisfactory and so painful.

It has been his fate, however, to cross, during the course of his explorations, a far greater extent of country than any Australian traveller had ever done previously, and as a very large portion of this had never before been trodden by the foot of civilized man, and from its nature is never likely to be so invaded again, it became a duty to record the knowledge which was thus obtained, for the information of future travellers and as a guide to the scientific world in their inquiries into the character and formation of so singular and interesting a country.

To enable the reader to judge of the author's capabilities for the task he undertook, and of the degree of confidence that may be due to his impressions or opinions, it may not be out of place to state, that the Expeditions of 1840-1 were not entered upon without a sufficient previous and practical experience in exploring.

For eight years the author had been resident in Australia, during which he had visited many of the located parts of New South Wales, Port Phillip, South Australia, Western Australia, and Van Diemen's Land. In the years 1836, 1837, 1838, 1839, and 1840 he had conducted expeditions across from Liverpool Plains in New South Wales to the county of Murray, from Sydney to Port Phillip, from Port Phillip to Adelaide, and from King George's Sound to Swan River, besides undertaking several explorations towards the interior, both from Port Lincoln and from Adelaide.

To the knowledge and experience which were thus acquired, the author must ascribe the confidence and good opinion of his fellow-colonists, which led them in 1840 to place under his command an undertaking of such importance, interest, and responsibility; and to these advantages he feels that he is in a great measure indebted, under God's blessing, for having been enabled successfully to struggle through the difficulties and dangers which beset him, in crossing from Adelaide to King George's Sound.

With this explanation for obtruding upon the

public, the author would also solicit their indulgence, for the manner in which the task has been performed. The only merit to which he can lay claim, is that of having faithfully described what he saw, and the impressions which were produced upon him at the time. In other respects it is feared that a work, which was entirely (and consequently very hastily) prepared for the press from the original notes, whilst voyaging from Australia to England, must necessarily be crude and imperfect. Where the principal object, however, was rather to record with accuracy than indulge in theory or conjecture, and where a simple statement of occurrences has been more attended to than the language in which they are narrated, plainness and fidelity will, it is hoped, be considered as some compensation for the absence of the embellishments of a more finished style, or a studied composition, and especially as the uncertainty attending the duration of the author's visit to England made it a matter of anxious consideration to hurry these volumes through the press as rapidly as possible. There is one circumstance to which he wishes particularly to allude, as accounting for the very scanty notices he is now able to give of the geology or botany of the country through which he travelled; it is the loss of all the specimens that were collected during the earlier part of the Expedition, which occurred after they had been sent to Adelaide; this loss has been irreparable, and has not only prevented him from ascertaining

points about which he was dubious, but has entirely precluded him from having the subjects considered, or the specimens classified and arranged by gentlemen of scientific acquirements in those departments of knowledge, in which the author is conscious he is himself defective. In the latter part of the Expedition, or from Fowler's Bay to King George's Sound, the dreadful nature of the country, and the difficulties and disasters to which this led, made it quite impossible either to make collections of any kind, or to examine the country beyond the immediate line of route; still it is hoped that the passing notices which are made in the journal, and the knowledge of the similarity of appearance and uniform character, prevalent throughout the greater portion of the country passed through, will be quite sufficient to give a general and correct impression of the whole.

To Mr. Gray of the British Museum, the author is particularly indebted for his valuable contribution on the Natural History of the Southern coast of Australia, and to Mr. Gould, the celebrated Ornithologist, his thanks are equally due, for a classified and most interesting list of the birds belonging to the same portion of the continent.

To Mr. Adam White, of the British Museum, he is also indebted for an account of some new insects, and to Dr. Richardson, for a scientific and classified arrangement of fish caught on the Southern coast, near King George's Sound. The plates to which the numbers refer in the last-mentioned paper, are

the admirable drawings made from life, by J. Neill, Esq. of King George's Sound, and now lodged at the British Museum. They are, however, both too numerous and too large to give in a work of this description, and will probably be published at some future time by their talented author.

For the account given of the Aborigines the author deems it unnecessary to offer any apology; a long experience among them, and an intimate knowledge of their character, habits, and position with regard to Europeans, have induced in him a deep interest on behalf of a people, who are fast fading away before the progress of a civilization, which ought only to have added to their improvement and prosperity. Gladly would the author wish to see attention awakened on their behalf, and an effort at least made to stay the torrent which is overwhelming them.

It is most lamentable to think that the progress and prosperity of one race should conduce to the downfal and decay of another; it is still more so to observe the apathy and indifference with which this result is contemplated by mankind in general, and which either leads to no investigation being made as to the cause of this desolating influence, or if it is, terminates, to use the language of the Count Strzelecki, "in the inquiry, like an inquest of the one race upon the corpse of the other, ending for the most part with the verdict of 'died by the visitation of God.'"

In his attempt to delineate the actual circumstances and position of the natives, and the just claims they have upon public sympathy and benevolence, he has been necessitated to refer largely to the testimony of others, but in doing this he has endeavoured as far as practicable, to support the views he has taken by the writings or opinions of those who are, or who have been resident in the Colonies, and who might therefore be supposed from a practical acquaintance with the subject, to be most competent to arrive at just conclusions.

In suggesting the only remedy which appears at all calculated to mitigate the evil complained of, it has studiously been kept in view that there are the interests of two classes to be provided for, those of the Settlers, and those of the Aborigines, it is thought that these interests cannot with advantage be separated, and it is hoped that it may be found practicable to blend them together.

The Aborigines of New Holland are not on the whole a numerous people; they are generally of a very inoffensive and tractable character, and it is believed that they may, under ordinary circumstances, almost always be rendered peaceable and well-disposed by kind and consistent treatment. Should this, in reality, prove to be the case, it may be found perhaps, that they could be more easily managed, and in the long run at a less expense, by some such system as is recommended, than by any other requiring means of a more retaliatory or

coercive character. The system proposed is at least one which by removing in a great measure temptation from the native, and thereby affording comparative security to the settlers, will have a powerful effect in inducing the latter to unite with the Government in any efforts made to ameliorate the condition of the Aborigines; a union which under present or past systems has not ever taken place, but one which it is very essential should be effected, if any permanent good is hoped for.

To Mr. Moorhouse the author returns his best thanks for his valuable notes on the Aborigines, to which he is indebted for the opportunity of giving an account of many of the customs and habits of the Adelaide tribes.

To Anthony Forster, Esq. he offers his warmest acknowledgments for his assistance in overlooking the manuscripts during the voyage from Australia, and correcting many errors which necessarily resulted from the hurried manner in which they were prepared; it is to this kind supervision must be ascribed the merit—negative though it may be—of there not being more errors than there are.

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AUSTRALIA,

FROM PORT MACQUARIE TO MORETON BAY,

WITH

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THE GEOLOGY, NATURAL PRODUCTIONS, FERTILITY,

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Drawn by J. Wall.

ROYAL ASIATIC SOCIETY BOMBAY BRANCH OF THE

JOURNAL OF EXPEDITIONS

IN

CENTRAL AND SOUTHERN AUSTRALIA,

IN 1840.

CHAPTER I.

ORIGIN OF THE EXPEDITION—CONTEMPLATED EXPLORATION TO THE WESTWARD—MEETING OF THE COLONISTS AND SUBSCRIPTIONS ENTERED INTO FOR THAT PURPOSE—NOTES ON THE UNFAVOURABLE NATURE OF THE COUNTRY TO THE WESTWARD, AND PROPOSAL THAT THE NORTHERN INTERIOR SHOULD BE EXAMINED INSTEAD—MAKE AN OFFER TO THE GOVERNOR TO CONDUCT SUCH AN EXPEDITION—CAPTAIN STURT'S LECTURE—INTERVIEW WITH THE GOVERNOR, ARRANGEMENT OF PLANS—PREPARATION OF OUTFIT—COST OF EXPEDITION—NAME A DAY FOR DEPARTURE—PUBLIC BREAKFAST AND COMMENCEMENT OF THE UNDERTAKING.

BEFORE entering upon the account of the expedition sent to explore the interior of Australia, to which the following pages refer, it may perhaps be as well to advert briefly to the circumstances which led to the undertaking itself, that the public being fully in possession of the motives and inducements which led me, at a very great sacrifice of my private means, to engage in an exploration so hazardous and arduous, and informed of the degree of confidence reposed in me by those interested in the undertaking, and the sanguine hopes and high expectations that were formed as to the result, may be.

better able to judge how far that confidence was well placed, and how far my exertions were commensurate with the magnitude of the responsibility I had undertaken.

I have felt it the more necessary to allude to this subject now, because I was in some measure at the time instrumental in putting a stop to a contemplated expedition to the westward, and of thus unintentionally interfering with the employment of a personal friend of my own, than whom no one could have been more fitted to command an undertaking of the kind, from his amiable disposition, his extensive experience, and his general knowledge and acquirements.

Upon returning, about the middle of May 1840, from a visit to King George's Sound and Swan River, I found public attention in Adelaide considerably engrossed with the subject of an overland communication between Southern and Western Australia. Captain Grey, now the Governor of South Australia, had called at Adelaide on his way to England from King George's Sound, and by furnishing a great deal of interesting information relative to Western Australia, and pointing out the facilities that existed on its eastern frontier, as far as it was then known, for the entrance of stock from the Eastward, had called the attention of the flockmasters of the Colony to the importance of opening a communication between the two places, with a view to the extension of their pastoral interests. The notes of Captain Grey, referring to this subject,

were published in the South Australian Register newspaper of the 28th March, 1840. On the 30th of the same month, a number of gentlemen, many of whom were owners of large flocks and herds, met together, for the purpose of taking the matter into consideration, and the result of this conference was the appointment of a Committee, whose duty it was to report upon the best means of accomplishing the object in view. On the 4th, 7th, and 9th of April other meetings were held, and the results published in the South Australian Register, of the 11th April, as follows:—

OVERLAND ROUTE TO WESTERN AUSTRALIA.

"At a Meeting of the Committee for making arrangements for an expedition to explore an overland route to Western Australia, held the 7th of April, the Hon. the Surveyor-general in the chair, the following resolutions were agreed to:—

That a communication be made to the Government of Western Australia, detailing the objects contemplated by this Committee, and further stating that the assistance of the Government of this province has been obtained.

That a communication be made to the Hon. the Surveyor-general, the Hon. the Advocate-general, the Hon. G. Leake, Esq. of Western Australia, with a request that they will form a committee in conjunction with such settlers as may feel interested in the same undertaking, for the purpose of collecting private subscriptions, and co-operating with this committee.

Resolved, that similar communications be made to the Government of New South Wales, and to the following gentlemen who are requested to act as a committee with the same power as that of Western Australia: Hon. E. Deas Thomson, Colonial Secretary; William Macarthur, Esq.; Captain Parker; P. King, R.N.; Stuart Donaldson, Esq.; George Macleay, Esq.; Charles Campbell, Esq.

That this Committee would propose, in order to facilitate the progress of the expedition, that depôts be formed at convenient points on the route; that it is proposed to make Fowler's Bay the first depôt on the route from Adelaide, and to leave it to the Government of Western Australia to decide upon the sites which their local knowledge may point out as the most eligible for similar stations, as far to the eastward as may appear practicable.

That a subscription list be immediately opened in Adelaide to collect funds in aid of the undertaking.

That R. F. Newland, Esq., be requested to act as Treasurer to this Committee, and that subscriptions be received at the Banks of Australasia and South Australia.

E. C. FROME, Chairman.
CHAS. BONNEY, Secretary.

The Committee again met on the 9th April—the Hon. the Assistant Commissioner in the chair. It was resolved that the following statement head the subscription list:—

"Several meetings having taken place at Adelaide of persons interested in the discovery of an overland route to Western Australia, and it being the general opinion of those meetings that such an enterprise would very greatly benefit the colonists of Eastern, Southern, and Western Australia, it was determined to open subscriptions for the furtherance of this most desirable object under the direction of the following Committee:

G. A. Anstey, Esq.
Charles Bonney, Esq.
John Brown, Esq.
Edward Eyre, Esq.
John Finniss, Esq.
J. H. Fisher, Esq.
Lieutenant Frome, Surveyor-general
O. Gilles, Esq.
Captain Grey
J. B. Hack, Esq.
G. Hamilton, Esq.
Ephraim Howe, Esq
John Knott, Esq.
Duncan M'Farlane, Esq.
David McLaren, Esq.
John Morphett, Esq.
Chas. Mann, Esq.
R. F. Newland, Esq.
Dr. Rankin. Esq.
G. Stevenson, Esq.
F. Stephens, Esq.
W. Smilie, Esq.
T. B. Strangways, Esq.
Capt. Sturt, Ass. Com.
John Walker, Esq.

The very great importance of the undertaking as leading to results, and in all probability to discoveries, the benefits of which are at present unforeseen, but which, like the opening of the Murray to this Province, may pave the way to a high road from hence to Western Australia, will, it is hoped meet with that support from the public which undertakings of great national interest deserve, and which best evince the enterprise and well-doing of a rising colony.

That Captain Grey, being about to embark for England, the Committee cannot allow him to quit these shores without expressing their regret that his stay has been so short, and the sense they entertain of the great interest he has evinced in the welfare of the colony, and the disinterested support he has given an enterprise which is likely to lead to such generally beneficial results as that under consideration.

CHAS. STURT, Chairman.
CHAS. BONNEY, Secretary.

LIST OF SUBSCRIPTIONS RECEIVED YESTERDAY.

The Government of South Australia .	£200
His Excellency the Governor (absent at Port Lincoln) and the Colonists . .	£349. 10*s*

Such was the state in which I found the question on my return from Western Australia. All had been done that was practicable, until answers were received from the other Colonies, replying to the applications for assistance and co-operation in the proposed undertaking.

Having been always greatly interested in the examination of this vast but comparatively unknown continent, and having already myself been frequently engaged in long and harassing explorations, it will not be deemed surprising that I should at once have

turned my attention to the subject so prominently occupying the public mind. I have stated that the principal object proposed to be attained by the expedition to the westward, was that of opening a route for the transit of stock from one colony to the other—nay it was even proposed and agreed to by a majority of the gentlemen attending the public meeting that the first party of exploration should be accompanied by cattle. Now, from my previous examination of the country to the westward of the located parts of South Australia, I had in 1839 fully satisfied myself, not only of the difficulty, but of the utter impracticability of opening an overland route for stock in that direction, and I at once stated my opinion to that effect, and endeavoured to turn the general attention from the Westward to the North, as being the more promising opening, either for the discovery of a good country, or of an available route across the continent. The following extract, from a paper by me on the subject, was published in the South Australian Register of the 23rd May, 1840, and contains my opinion at that time of the little prospect there was of any useful result accruing from the carrying out of the proposed expedition to the Westward :—

"It may now, therefore, be a question for those who are interested in the sending an expedition overland to the Swan River to consider what are likely to be the useful results from such a journey. In a geographical point of view it will be exceedingly interesting to know the character of the in-

tervening country between this colony and theirs, and to unfold the secrets hidden by those lofty, and singular cliffs at the head of the Great Bight, and so far, it might perhaps be practicable—since it is possible that a light party might, in a favourable season, force their way across. As regards the transit of stock, however, my own conviction is that it is quite impracticable. The vast extent of desert country to the westward—the scarcity of grass—the denseness of the scrub—and the all but total absence of water, even in the most favourable seasons, are in themselves, sufficient bars to the transit of stock, even to a distance we are already acquainted with. I would rather, therefore, turn the public attention to the Northward, as being the most probable point from which discoveries of importance may be made, or such as are likely to prove beneficial to this and the other colonies, and from which it is possible the veil may be lifted, from the still unknown and mysterious interior of this vast continent."

On the 27th I dined with His Excellency the Governor, and had a long conversation with him on the subject of the proposed Western Expedition, and on the exploration of the Northern Interior. With his usual anxiety to promote any object which he thought likely to benefit the colony, and advance the cause of science, His Excellency expressed great interest in the examination of the Northern Interior, and a desire that an attempt should be made to penetrate its recesses during the ensuing season.

As I had been the means of diverting public attention from a Western to a Northern exploration, so was I willing to encounter myself the risks and toils of the undertaking I had suggested, and I

therefore at once volunteered to His Excellency to take the command of any party that might be sent out, to find one-third of the number of horses required, and pay one-third of the expenses. Two days after this a lecture was delivered at the Mechanics' Institute in Adelaide, by Captain Sturt, upon the Geography and Geology of Australia, at the close of which that gentleman acquainted the public with the proposal I had made to the Governor, and the sanction and support which His Excellency was disposed to give it. The following extract is from Captain Sturt's address, and shews the disinterested and generous zeal which that talented and successful traveller was ever ready to exert on behalf of those who were inclined to follow the career of enterprise and ambition in which he had with such distinction led the way.

"Before I conclude, however, having drawn your attention to the science of geology, I would for a moment dwell on that of geography, and the benefit the pursuit and study of it has been to mankind. To geography we owe all our knowledge of the features of the earth's surface, our intercourse with distant nations, and our enjoyments of numberless comforts and luxuries. The sister sciences of geography and hydrography have enabled us to pursue our way to any quarter of the habitable and uninhabitable world. With the history of geography, moreover, our proudest feelings are associated. Where are there names dearer to us than those of the noble and devoted Columbus, of Sebastian Cabot, of Cook, of Humboldt, and of Belzoni and La Perouse? Where shall we find the generous and heroic devotion of the explorers of Africa surpassed? Of Denham, of Clapperton, of Oudeny, and of the many who hnve sacrificed their valuable

lives to the pestilence of that climate or to the ferocity of its inhabitants?—And where shall we look for the patient and persevering endurance of Parry, of Franklin, and of Back, in the northern regions of eternal snow? If, ladies and gentlemen, fame were to wreathe a crown to the memory of such men, there would not be a leaf in it without a name. The region of discovery was long open to the ambitious, but the energy and perseverance of man has now left but little to be done in that once extensive and honourable field. The shores of every continent have been explored—the centre of every country has been penetrated save that of Australia—thousands of pounds have been expended in expeditions to the Poles—but this country, round which a girdle of civilization is forming, is neglected, and its recesses, whether desert or fertile, are unsought and unexplored. What is known of the interior is due rather to private enterprise than to public energy. Here then there is still a field for the ambitious to tread. Over the centre of this mighty continent there hangs a veil which the most enterprising might be proud to raise. The path to it, I would venture to say, is full of difficulty and danger; and to him who first treads it much will be due. I, who have been as far as any, have seen danger and difficulty thicken around me as I advanced, and I cannot but anticipate the same obstacles to the explorer, from whatever point of these extreme shores he may endeavour to force his way. Nevertheless, gentlemen, I shall envy that man who shall first plant the flag of our native country in the centre of our adopted one. There is not one deed in those days to be compared with it, and to whoever may undertake so praiseworthy and so devoted a task, I wish that success, which Heaven sometimes vouchsafes to those who are actuated by the first of motives—the public good; and the best of principles—a reliance on Providence. I would I myself could undertake such a task, but fear that may not be. However, there is a gentleman among us, who is anxious to undertake such a journey. He has calculated that in taking a party five hundred miles into the interior, the expense would not be

more than £300. and the price of ten horses. At a meeting held some time ago, on this very subject, about half that sum was subscribed.—His Excellency the Governor has kindly promised to give £100. and two horses—and I think we may very soon make up the remainder; and thus may set out an expedition which may explore the as yet unknown interior of this vast continent, which may be the means, by discovery, of conferring a lasting benefit on the colony—and hand down to posterity the name of the person who undertakes it."

On the same day I received a note from the private secretary, stating that the Governor wished to see me, and upon calling on His Excellency I had a long and interesting interview on the subject of the expedition, in the course of which arrangements were proposed and a plan of operations entered into. I found in His Excellency every thing that was kind and obliging. Sincerely desirous to confer a benefit upon the colony over which he presided, he was most anxious that the expedition should be fitted out in as complete and efficient a manner as possible, and to effect this every assistance in his power was most frankly and freely offered. In addition to the sanction and patronage of the government and the contribution of £100. towards defraying the expenses, His Excellency most kindly offered me the selection of any two horses I pleased, from among those belonging to the police, and stated, that if I wished for the services of any of the men in the public employment they should be permitted to accompany me on the journey. The Colonial cutter, Waterwitch, was also most liberally

offered, and thankfully accepted, to convey a part of the heavy stores and equipment to the head of Spencer's Gulf, that so far, the difficulties of the land journey to that point, at least, might be lessened.

I was now fairly pledged to the undertaking, and as the winter was rapidly advancing, I became most anxious to get all preparations made as soon as possible to enable me to take advantage of the proper season. On the first of June I commenced the necessary arrangements for organizing my party, and getting ready the equipment required. To assist me in these duties, and to accompany me as a companion in the journey, I engaged Mr. Edward Bate Scott, an active, intelligent and steady young friend, who had already been a voyage with me to Western Australia, and had travelled with me overland from King George's Sound to Swan River.

Meetings of the colonists interested in the undertaking were again held on the 2nd and 5th of June, at which subscriptions were entered into for carrying out the object of the expedition; and a brief outline of my plans was given by the Chairman, Captain Sturt, in the following extract from his address.

"The Chairman went on to state, that Mr. Eyre would first proceed to Lake Torrens and examine it, and then penetrate as far inland in a northerly direction as would be found practicable. With regard to an observation which he (the Chairman) had made on Friday evening, regarding this continent having been formerly an archipelago, he stated, that he was of opinion that a considerable space of barren land in all probability existed

between this district and what had formerly been the next island. This space was likely to be barren, though of course it would be impossible to say how far it extended. He had every reason to believe, from what he had seen of the Australian continent, that at some distance to the northward, a large tract of barren country would be found, or perhaps a body of water, beyond which, a good country would in all probability exist. The contemplated expedition, he hoped would set supposition at rest—and as the season was most favourable, and Mr. Eyre had had much personal experience in exploring, he had no doubt but the expedition would be successful. The eyes of all the Australasian colonies—nay, he might say of Britain—are on the colonists of South Australia in this matter; and he felt confident that the result would be most beneficial, not only to this Province, but also to New South Wales and the Australian colonies generally—for the success of one settlement is, in a measure, the success of the others."

An advertisement, published in the Adelaide Journals of 13th June, shewed the progress that had been made towards collecting subscriptions for the undertaking, and the spirited and zealous manner in which the colonists entered into the project. Up to that date the sum of £541. 17*s* 5*d*, had been collected and paid into the Bank of Australia.

Having now secured the necessary co-operation and assistance, my arrangements proceeded rapidly and unremittingly, whilst the kindness of the Governor, the Committee of colonists, my private friends and the public generally, relieved me of many difficulties and facilitated my preparations in a manner such as I could hardly have hoped or expected. Every one seemed interested in the undertaking,

and anxious to promote its success; zeal and energy and spirit were infused among all connected with it, and everything went on prosperously.

In addition to the valuable aid which I received from his Excellency the Governor, I was particularly indebted to Captain Frome the Surveyor-general, Captain Sturt the Assistant-commissioner, and Thomas Gilbert, Esq. the Colonial storekeeper, for unceasing kindness and attention, and for much important assistance rendered to me by the loan of books and instruments, the preparation of charts, and the fitting up of drays, &c. &c.

Captain Frome, too, now laid me under increased obligations by giving up his own servant, Corporal Coles of the Royal Sappers and Miners, upon my expressing a wish to take him with me, and the Governor sanctioning his going.

This man had accompanied Captain Grey in all his expeditions on the North-west coast of New Holland—and had been highly recommended by that traveller; he was a wheelwright by trade, and being a soldier was likely to prove a useful and valuable addition to my party; and I afterwards found him a most obliging, willing and attentive person.

To the Governor and to the Committee of colonists I owe many thanks, for the very flattering and gratifying confidence they reposed in me, a confidence which left me as unrestricted in my detail of outfit and equipment, as I was unfettered in my

plan of operations in the field. This enabled me to avoid unnecessary delays, and to hasten every thing forward as rapidly as possible, so that when requested by the Governor to name a day for my departure I was enabled to fix upon the 18th of June.

Having already done all in their power to forward and assist the equipment and arrangement of the expedition, the Governor and Mrs. Gawler were determined still further to increase the heavy debt of gratitude which I was already under to them, by inviting myself and party to meet the friends of the expedition at Government House on the morning of our departure, that by a public demonstration of interest in our welfare, we might be encouraged in the undertaking upon which we were about to enter—and might be stimulated to brave the perils to which we should shortly be exposed, by a remembrance of the sympathy expressed in our behalf, and the pledge we should come under to the public upon leaving the abode of civilised man, for the unknown and trackless region which lay before us.

On the 15th of June I attended a meeting of the Committee, and presented for audit the accounts of the expenditure incurred up to that date. On the 16th I had a sale of all my private effects, furniture, &c. by auction, and arranged my affairs in the best way that the very limited time at my disposal would permit.

The 17th found me still with plenty of work to do, as there were many little matters to attend to at the last, which the best exertions could not sooner set aside.

Mr. Scott, who ever since the commencement of our preparations, had been most indefatigable and useful in his exertions, was even still more severely tasked on this day; at night, however, we were all amply rewarded, by seeing every thing completely and satisfactorily arranged—the bustle, confusion, and excitement over, and our drays all loaded, and ready to commence on the morrow a journey of which the length, the difficulty, and the result, were all a problem yet to be solved.

In the short space of seventeen days from the first commencement of our preparations, we had completely organized and fully equipped a party for interior exploration. Every thing had been done in that short time—men hired, horses sought out and selected, drays prepared, saddlery, harness, and the thousand little things required on such journeys, purchased, fitted and arranged. In that short time too, the Colonists had subscribed and collected the sum of five hundred pounds towards defraying the expenses, exclusive of the Government contribution of £100.

Unfortunately, at the time the expedition was undertaken, every thing in South Australia was excessively dear, and the cost of its outfit was therefore much greater in 1840, than it would have been

any year since that period; nine horses (including a Timor pony, subsequently procured at Port Lincoln) cost £682. 10*s*, whilst all other things were proportionably expensive. After the expedition had terminated and the men's wages and other expenses had been paid, the gross outlay amounted to £1391. 0*s* 7*d* :—of this the

	£.	s.	d.
Amount of Donation from Government was	100	0	0
Amount of Subscriptions of the Colonists	582	4	9
Sale of the Drays and part of the Equipment	28	0	0
Amount paid by myself	680	15	10
	£1391	0	7

In addition to this expenditure, considerable as it was, there were very many things obtained from various sources, which though of great value did not come into the outlay already noted. Among these were two horses supplied by the Government, and three supplied by myself, making with the nine bought for £682. 10*s*, a total of fourteen horses. The very valuable services of the cutters "Hero" and "Waterwitch," were furnished by the Government; who also supplied all our arms and ammunition, with a variety of other stores. From my many friends I received donations of books and instruments, and I was myself enabled to supply from my own resources a portion of the harness, saddlery, tools, and tarpaulins, together with a light cart and a tent.

June 18.—Calling my party up early, I ordered the horses to be harnessed, and yoked to the

drays, at half past nine the whole party, (except the overseer who was at a station up the country) proceeded to Government House, where the drays were halted for the men to partake of a breakfast kindly provided for them by His Excellency and Mrs. Gawler, whilst myself and Mr. Scott joined the very large party invited to meet us in the drawing room.

The following account of the proceedings of the morning, taken from the South Australian Register, of the 20th June, may perhaps be read with interest; at least it will shew the disinterested spirit and enterprising character of the colonists of South Australia, even at this early stage of its history, and especially how much the members of our little party were indebted to the kindness and good feeling of the Governor and colonists, who were anxious to cheer and stimulate us under the difficulties and trials we had to encounter, by their earnest wishes and prayers for our safety and success.

EXPLORATORY EXPEDITION TO THE CENTRE OF NEW HOLLAND.

THE arrangements for the expedition into the interior, undertaken by Mr. Eyre, having been completed, His Excellency the Governor and Mrs. Gawler issued cards to a number of the principal colonists and personal friends of Mr. Eyre, to meet him at Government House on the morning of his departure. On Thursday last accordingly (the anniversary of Waterloo, in which His Excellency and the gallant 52nd bore so conspicuous a part) a very large party of ladies and gentlemen assembled. After an

elegant *dejeuner a la fourchette*, His Excellency the Governor rose and spoke as nearly as we could collect, as follows:—

"We are assembled to promote one of the most important undertakings that remain to be accomplished on the face of the globe—the discovery of the interior of Australia. As Captain Sturt in substance remarked in a recent lecture, of the five great divisions of the earth, Europe is well known; Asia and America have been generally searched out; the portion that remains to be known of Africa is generally unfavourable for Europeans, and probably unfit for colonization; but Australia, our great island continent, with a most favourable climate, still remains unpenetrated, mysterious, and unknown. Without doing injustice to the enterprising attempts of Oxley, Sturt, and Mitchell, I must remark that they were commenced from a very unfavourable point—from the eastern and almost south-eastern extremity of the island—and consequently the great interior still remains untouched by them, the south-eastern corner alone having been investigated. As Captain Sturt some years since declared, this Province is the point from which expeditions to the deep interior should set out. This principle, I know, has been acknowledged by scientific men in Europe; and it is most gratifying to see the spirit with which our Colonists on the present occasion have answered to the claim which their position imposes upon them. Mr. Eyre goes forth this day, to endeavour to plant the British flag—the flag which in the whole world has "braved for a thousand years the battle and the breeze"—on the tropic of Capricorn (as nearly as possible in 135° or 136° of longitude) in the very centre of our island continent. On this day twenty-five years since, commencing almost at this very hour, the British flag braved indeed the battle, and at length floated triumphant in victory on the field of Waterloo. May a similar glorious success attend the present undertaking! Mr. Eyre goes forth to brave a battle of a different kind, but which in the whole, may present dangers equal to those of Waterloo. May triumph crown his efforts, and may the British flag, planted by him in the centre of Australia, wave for another thousand years

over the peace and prosperity of the mighty population which immigration is pouring in upon us! Of the immediate results of his journey, no one, indeed, can at present form a solid conjecture. Looking to the dark side, he may traverse a country useless to man; but contemplating the bright side, and remembering that but a few years since Sturt, setting off on an equally mysterious course, laid the foundation for the large community in which we dwell, it is in reason to hope that Mr. Eyre will discover a country which may derive support from us, and increase the prosperity of our Province. I must express my gratification at the manner in which this enterprise, noble, let its results be what they may, has been supported by our colonists at large. It is a greater honor to be at the head of the government of a colony of enlightened and enterprising men, than at that of an empire of enslaved and ignorant beings in the form of men. I count it so. May the zeal which has been exhibited in the colony in the promotion of every good and useful work ever continue. Some ladies of Adelaide have worked a British Union Jack for Mr. Eyre. Captain Sturt will be their representative to present it to him. After that, we will adjourn to the opposite rooms to invoke a blessing on the enterprise. All here, and I believe the whole colony, give to Mr. Eyre their best wishes, but to good wishes right-minded men always add fervent prayers. There is an Almighty invisible Being in whose hands are all events—man may propose, but it is for God only to dispose—let us therefore implore his protection."

The Hon. Captain Sturt then received a very handsome Union Jack, neatly worked in silk; and presenting it to Mr. Eyre, spoke nearly as follows:—

"It cannot but be gratifying to me to be selected on such an occasion as this, to perform so prominent a part in a duty the last a community can discharge towards one who, like you, is about to risk your life for its good. I am to deliver to you this flag, in the name of the ladies who made it, with their best wishes for your success, and their earnest prayers for your safety. This noble colour, the ensign of our country, has cheered the

brave on many an occasion. It has floated over every shore of the known world, and upon every island of the deep. But you have to perform a very different, and a more difficult duty. You have to carry it to the centre of a mighty continent, there to leave it as a sign to the savage that the footstep of civilized man has penetrated so far. Go forth, then, on your journey, with a full confidence in the goodness of Providence; and may Heaven direct your steps to throw open the fertility of the interior, not only for the benefit of the Province, but of our native country; and may the moment when you unfurl this colour for the purpose for which it was given to you, be as gratifying to you as the present."

Mr. Eyre, visibly and deeply affected, returned his warmest thanks, and expressed his sense of the kindness he had received on the present occasion. He hoped to be able to plant the flag he had just received in the centre of this continent. If he failed, he should, he hoped, have the consciousness of having earnestly endeavoured to succeed. To His Excellency the Governor, his sincere thanks were due for the promptitude with which so much effectual assistance to the expedition had been rendered. Mr. Eyre also begged leave to return his thanks to the Colonists who had so liberally supported the enterprise; and concluded by expressing his trust that, through the blessing of God, he would be enabled to return to them with a favourable report of the country into which he was about to penetrate.

The company then returned to the library and drawing-room, where the Colonial Chaplain, the Rev. C. B. Howard, offered up an affecting and appropriate prayer, and at twelve precisely, Mr. Eyre, accompanied by a very large concourse of gentlemen on horseback, left Government House, under the hearty parting cheers of the assembled party."

Leaving Government House under the hearty cheers of the very large concourse assembled to witness our departure outside the grounds; Mr. Scott, myself, and two native boys (the drays having

previously gone on) proceeded on horseback on our route, accompanied by a large body of gentlemen on horseback, and ladies in carriages, desirous of paying us the last kind tribute of friendship by a farewell escort of a few miles.

At first leaving Government House we had moved on at a gentle canter, but were scarcely outside the gates, before the cheering of the people, the waving of hats, and the rush of so many horses, produced an emulation in the noble steeds that almost took from us the control of their pace, as we dashed over the bridge and up the hill in North Adelaide—it was a heart-stirring and inspiriting scene. Carried away by the enthusiasm of the moment, our thoughts and feelings were wrought to the highest state of excitement.

The time passed rapidly away, the first few miles were soon travelled over,—then came the halt,—the parting,—the last friendly cheer;—and we were alone in the wilderness. Our hearts were too full for conversation, and we wended on our way slowly and in silence to overtake the advance party.

CHAPTER II.

FIRST NIGHT'S ENCAMPMENT WITH PARTY—REFLECTIONS—ARRIVAL AT SHEEP STATION—RE-ARRANGEMENT OF LOADS—METHOD OF CARRYING FIRE-ARMS—COMPLETE THE NUMBER OF THE PARTY—THEIR NAMES—MOVE ONWARDS—VALLEY OF THE LIGHT—EXTENSIVE PLAINS—HEAD OF THE GILBERT—SCARCITY OF FIREWOOD—GRASSY WELL-WATERED DISTRICTS—THE HILL AND HUTT RIVERS—INDICATIONS OF CHANGE GOING ON IN APPEARANCE AND CHARACTER OF THE COUNTRY, TRACEABLE IN THE REMAINS OF TIMBER IN THE PLAINS AND IN THE OPENINGS AMONG SCRUBS—THE BROUGHTON—REEDY WATERCOURSE—CAMPBELL'S RANGE—COURSE OF THE BROUGHTON.

June 18.—The party having left Adelaide late in the forenoon, and it being the first day of working the horses, I did not wish to make a long stage; having followed the usual road, therefore, as far as the little Parra, the drays were halted upon that watercourse (after a journey of about twelve miles), and we then proceeded to bivouac for the first time. For the first time too since I had engaged to command the expedition, I had leisure to reflect upon the prospects before me.

During the hurry and bustle of preparation,

and in the enthusiasm of departure, my mind was kept constantly on the stretch, and I had no time for calm and cool consideration, but now that all was over and the journey actually commenced, I was again able to collect my thoughts and to turn my most serious and anxious attention to the duty I had undertaken. The last few days had been so fraught with interest and occupation, and the circumstances of our departure this morning, had been so exciting, that when left to my own reflections, the whole appeared to me more like a dream than a reality. The change was so great, the contrast so striking. From the crowded drawing room of civilized life, I had in a few hours been transferred to the solitude and silence of the wilds, and from being but an unit in the mass of a large community, I had suddenly become isolated with regard to the world, which, so far as I was concerned, consisted now only of the few brave men who accompanied me, and who were dependant for their very existence upon the energy and perseverance and prudence with which I might conduct the task assigned to me. With this small, but gallant and faithful band, I was to attempt to penetrate the vast recesses of the interior of Australia, to try to lift up the veil which has hitherto shrouded its mysteries from the researches of the traveller, and to endeavour to plant that flag which has floated proudly in all the known parts of the habitable globe, in the centre of a region as yet unknown, and unvisited save by the savage or the wild beast.

Those only who have been placed in similar circumstances can at all appreciate the feelings which they call forth. The hopes, fears, and anxieties of the leader of an exploring party, must be felt to be understood, when he is about to commence an undertaking which *must* be one of difficulty and danger, and which *may* be of doubtful and even fatal result.

The toil, care, and anxiety devolving upon him are of no ordinary character; everyday removes him further from the pale of civilization and from aid or assistance of any kind—whilst each day too diminishes the strength of his party and the means at his command, and thus renders him less able to provide against or cope with the difficulties that may beset him. A single false step, the least error of judgment, or the slightest act of indiscretion might plunge the expedition into inextricable difficulty or danger, or might defeat altogether the object in view. Great indeed was the responsibility I had undertaken —and most fully did I feel sensible of the many and anxious duties that devolved upon me. The importance and interest attached to the solution of the geographical problem connected with the interior of Australia, would, I well knew, engage the observation of the scientific world. If I were successful, the accomplishment of what I had undertaken would more than repay me in gratification for the toil and hazard of the enterprise—but if otherwise I could not help feeling that, however far the few friends who knew me might give me credit for exertion or perseverance, the world at large would be apt to reason

from the result, and to make too little allowance for difficulties and impediments, of the magnitude of which from circumstances they could be but incompetent judges.

With such thoughts as these, and revolving in my mind our future plans, our chances of success or otherwise, it will not be deemed surprising, that notwithstanding the fatigue and care I had gone through during the last fortnight of preparation, sleep should long remain a stranger to my pillow; and when all nature around me was buried in deep repose I alone was waking and anxious.

From former experience in a personal examination of the nature of the country north of the head of Spencer's Gulf, during the months of May and June, 1839, I had learnt that the farther the advance to the north, the more dreary and desolate the appearance of the country became, and the greater was the difficulty, both of finding and of obtaining access to either water or grass. The interception of the singular basin of Lake Torrens, which I had discovered formed a barrier to the westward, and commencing near the head of Spencer's Gulf, was connected with it by a narrow channel of mud and water. This lake apparently increased in width as it stretched away to the northward, as far as the eye could reach, when viewed from the farthest point attained by me in 1839, named by Colonel Gawler, Mount Eyre. Dreary as had been the view I then obtained, and cheerless as was the prospect from

that elevation, there was one feature in the landscape, which still gave me hope that something might be done in that direction, and had in fact been my principal inducement to select a line nearly north from Spencer's Gulf, for our route on the present expedition; this feature was the continuation, and the undiminished elevation of the chain of hills forming Flinders range, running nearly parallel with the course of Lake Torrens, and when last seen by me stretching far to the northward and eastward in a broken and picturesque outline.

It was to this chain of hills that I now looked forward as the stepping-stone to the interior. In its continuation were centered all my hopes of success, because in its recesses alone could I hope to obtain water and grass for my party. The desert region I had seen around its base, gave no hope of either, and though the basin of Lake Torrens appeared to be increasing so much in extent to the northward, I had seen nothing to indicate its terminating within any practicable distance, in a deep or navigable water. True the whole of the drainage from Flinders range, as far as was yet known, emptied into its basin, but such was the arid and sandy nature of the region through which it passed, that a great part of the moisture was absorbed, whilst the low level of the basin of the lake, apparently the same as that of the sea itself, forbade even the most distant hope of the water being fresh, should any be found in its bed.

It was in reflections and speculations such as these, that many hours of the night of my first encampment with the party passed away. The kindness of the Governor and our many friends had been so unbounded; their anxiety for our safety and comfort so great; their good wishes for our success so earnest, and their confidence in our exertions, so implicit, that I could not but look forward with apprehension, lest the success of our efforts might not equal what our gratitude desired, and even now I began to be fearful that the high expectations raised by the circumstances of our departure might not be wholly realised.

We had fairly commenced our arduous undertaking, and though the party might appear small for the extent of the exploration contemplated, yet no expedition could have started under more favourable or more cheering auspices; provided with every requisite which experience pointed out as desirable, and with every comfort which excess of kindness could suggest, we left too, with a full sense of the difficulties before us, but with a firm determination to overcome them, if possible. And I express but the sentiments of the whole party when I say, that we felt the events of the day of our departure, and the recollection of the anxiety and interest with which our friends were anticipating our progress, and hoping for our success, would be cherished as our watchword in the hour of danger, and be the incentive to perseverance and labour, when more than ordinary trials

should call for our exertions. The result we were willing to leave in the hands of that Almighty Being whose blessing had been implored upon our undertaking, and to whom we looked for guidance and protection in all our wanderings.

June 19.—On mustering the horses this morning it was found, that one or two had been turned loose without hobbles, and being fresh and high fed from the stables, they gave us a great deal of trouble before we could catch them, but at last we succeeded, and the party moved on upon the road to Gawler town, arriving there (12 miles) about noon; at this place we halted for half an hour, at the little Inn to lunch, and this being the last opportunity we should have of entering a house for many months to come, I was anxious to give my men the indulgence. After lunch I again moved on the party for five miles, crossing and encamping upon, a branch of the Parra or Gawler, where we had abundance of good water and grass.

June 20.—Having a long stage before us to-day, I moved on the party very early, leaving all roads, and steering across the bush to my sheep stations upon the Light. We passed through some very fine country, the verdant and beautiful herbage of which, at this season of the year, formed a carpet of rich and luxuriant vegetation. Having crossed the grassy and well wooded ranges which confine the waters of the Light to the westward, we descended to the plain, and reached my head station about sunset, after a

long and heavy stage of twenty miles—here we were to remain a couple of days to break up the station, as the sheep were sold, and the overseer and one of the men were to join the Expedition party.

The night set in cold and rainy, but towards morning turned to a severe frost; one of the native boys who had been sent a short cut to the station ahead of the drays, lost his road and was out in the cold all night—an unusual circumstance, as a native will generally keep almost as straight a direction through the wilds as a compass will point.

Sunday, June 21.—We remained in camp. The day was cold, the weather boisterous, with showers of rain at intervals, and the barometer falling; our delay enabled me to write letters to my various friends, before finally leaving the occupied parts of the country, I was glad too, to give the horses and men a little rest after the fatigue they had endured yesterday in crossing the country.

June 22.—As we still remained in camp, the day being dark and cloudy with occasional showers, I took the opportunity of having one of the drays boarded close up, and of re-arranging the loads, oiling the fire-arms, and grinding the axes, spades, &c.; we completed our complement of tools, tents, tarpaulins, &c. from those at the station, and had everything arranged on the drays in the most convenient manner, always having in view safety in carriage and facility of access; the best place for

the fire-arms I found to be at the outside of the sides, the backs, or the fronts, of those drays that were close boarded.

By nailing half a large sheepskin with the wool on in any of these positions, a soft cushion was formed for the fire-arms to rest against, they were then fixed in their places by a loop of leather for the muzzle, and a strap and buckle for the stock; whilst the other half of the sheepskin which hung loose, doubled down in front of the weapons. between them and the wheel, effectually preserving them from both dirt and wet, and at the same time keeping them in a position, where they could be got at in a moment, by simply lifting up the skin and unbuckling the strap; by this means too, all danger or risk was avoided, which usually exists when the fire-arms are put on or off the drays in a loaded state. I have myself formerly seen carbines explode more than once from the cocks catching something, in being pulled out from, or pushed in amidst the load of a dray, independently of the difficulty of getting access to them in cases of sudden emergency; a still better plan than the one I adopted, would probably be to have lockers made for the guns, to hang in similar places, and in a somewhat similar manner to that I have described, but in this case it would be necessary for the lockers to be arranged and fitted at the time the drays or carts were made.

All the time I could spare from directing or

superintending the loading of the drays, I devoted to writing letters and making arrangements for the regulation of my private affairs, which from the sudden manner in which I had engaged in the exploring expedition, and from the busy and hurried life I had led since the commencement of the preparations, had fallen into some confusion. I was now, however, obliged to content myself with such a disposition of them as the time and circumstances enabled me to make.—I observed the latitude of the station to be 34° 15′ 56″ S.

June 23.—Having got all the party up very early, I broke up the station, and sent one man on horseback into Adelaide with despatches and letters. My overseer and another man were now added to the party, making up our complement in number. Upon re-arranging the loads of the drays yesterday, I had found it inconvenient to have the instruments and tent equipage upon the more heavily loaded drays, and I therefore decided upon taking an extra cart and another horse from the station. This completed our alterations, and the party and equipment stood thus :—

Mr. Eyre.
Mr. Scott, *my assistant and companion.*
John Baxter, *Overseer.*
Corporal Coles, R. S. & M.
John Houston, *driving a three horse dray.*
R. M'Robert, *driving a three horse dray.*
Neramberein, Cootachah } *Aboriginal boys, to drive the sheep, track, &c.*

We had with us 13 horses and 40 sheep, and our other stores were calculated for about three months; in addition to which we were to have a further supply forwarded to the head of Spencer's Gulf by sea, in the Waterwitch, to await our arrival in that neighbourhood. This would give us the means of remaining out nearly six months, if we found the country practicable, and in that time we might, if no obstacles intervened, easily reach the centre of the Continent and return, or if practicable, cross to Port Essington on the N. W. coast.

About eleven I moved on the party up the Light for 8 miles, and then halted after an easy stage. As the horses were fresh and the men were not yet accustomed to driving them, I was anxious to move quietly on at first, that nothing might be done in a hurry, and every one might gradually settle down to what he had to perform, and that thus by a little care and moderation at first, those evils, which my former travelling had taught me were frequently the result of haste or inexperience, might be avoided. Nothing is more common than to get the withers of horses wrung, or their shoulders and backs galled at the commencement of a journey, and nothing more difficult than to effect a cure of this mischief whilst the animals are in use. By the precaution which I adopted, I succeeded in preventing this, for the present.

As we passed up the valley of the Light, we had some rich and picturesque scenery around us—the

fertile vale running nearly north and south, backed to the westward by well wooded irregular ranges grassed to their summits, and to the eastward shut in by a dark looking and more heavily timbered range, beyond which rose two peaks of more distant hills, through the centre of the valley the Light took its course, but at present it was only a chain of large ponds unconnected by any stream; and thus, I believe, it remains the greater part of the year, although occasionally swollen to a broad and rapid current.

June 24.—The horses having strayed a little this morning, and given us some trouble to get them, it was rather late when we started; we, however, crossed the low ridges at the head of the Light, and entering upon extensive plains to the north, we descended to a channel, which I took to be the head of a watercourse called the "Gilbert."

Finding here some tolerably good water and abundance of grass, I halted the party for the night, though we were almost wholly without firewood, an inconvenience that we felt considerably, as the nights now were very cold and frosty. Our stage had been fourteen miles to-day, running at first over low barren ridges, and then crossing rich plains of a loose brown soil, but very heavy for the drays to travel over.

At our camp, a steep bank of the watercourse presented an extensive geological section, but there was

nothing remarkable in it, the substrata consisting only of a kind of pipe clay.

June 25.—Upon starting this morning we traversed a succession of fine open and very grassy plains, from which we ascended the low ridges forming the division of the waters to the north and south. In the latter direction, we had left the heads of the "Gilbert" and "Wakefield" chains of ponds, whilst in descending in the former we came upon the "Hill," a fine chain of ponds taking its course through a very extensive and grassy valley, but with little timber of any kind growing near it. On this account I crossed it, and passing on a little farther encamped the party on a branch of the "Hutt," and within a mile and a half of the main course of that chain of ponds. Our whole route to-day, had been through a fine and valuable grazing district, with grass of an excellent description, and of great luxuriance.

We were now nearly opposite to the most northerly of the out stations, and after seeing the party encamp, I proceeded, accompanied by Mr. Scott, to search for the stations for the purpose of saying good bye to a few more of my friends. We had not long, however, left the encampment when it began to rain and drove us back to the tents, effectually defeating the object with which we had commenced our walk. Heavy rain was apparently falling to the westward of us, and the night set in dark and lowering.

In some parts of the large plains we had crossed in the morning, I had observed traces of the remains of timber, of a larger growth than any now found in the same vicinity, and even in places where none at present exists. Can these plains of such very great extent, and now so open and exposed, have been once clothed with timber? and if so, by what cause, or process, have they been so completely denuded, as not to leave a single tree within a range of many miles? In my various wanderings in Australia, I have frequently met with very similar appearances; and somewhat analogous to these, are the singular little grassy openings, or plains, which are constantly met with in the midst of the densest Eucalyptus scrub.

Every traveller in those dreary regions has appreciated these, (to him) comparatively speaking, oasises of the desert—for it is in them alone, that he can hope to obtain any food for his jaded horse; without, however, their affording under ordinary circumstances, the prospect of water for himself. Forcing his way through the dense, and apparently interminable scrub, formed by the Eucalyptus dumosa, (which in some situations is known to extend for fully 100 miles), the traveller suddenly emerges into an open plain, sprinkled over with a fine silky grass, varying from a few acres to many thousands in extent, but surrounded on all sides by the dreary scrub he has left.

In these plains I have constantly traced the remains of decayed scrub—generally of a larger growth than that surrounding them—and occasionally appearing to have grown very densely together. From this it would appear that the face of the country in those low level regions, occupied by the Eucalyptus dumosa, is gradually undergoing a process which is changing it for the better, and in the course of centuries perhaps those parts of Australia which are now barren and worthless, may become rich and fertile districts, for as soon as the scrub is removed grass appears to spring up spontaneously. The plains found interspersed among the dense scrubs may probably have been occasioned by fires, purposely or accidentally lighted by the natives in their wanderings, but I do not think the same explanation would apply to these richer plains where the timber has been of a large growth and the trees in all probability at some distance apart—here fires might burn down a few trees, but would not totally annihilate them over a whole district, extending for many miles in every direction.

June 26.—This morning brought a very heavy fog, through which we literally could not see 100 yards, when the party moved on to the "Hutt" chain of ponds, and then followed that watercourse up to the Broughton river, which was crossed in Lat. 33° 28′ S. At this point the bed of the Broughton is of considerable width, and its channel is occupied by long,

wide and very deep water holes, connected with one another by a strongly running stream, which seldom or never fails even in the driest seasons. The soil upon its banks however is not valuable, being generally stony and barren, and bearing a sort of prickly grass, (Spinifex). Wild fowl abound on the pools. On a former occasion, when I first discovered the Broughton, I obtained both ducks and swans from its waters, but now I had no time for sporting, being anxious to push on to the "reedy watercourse," a halting place in my former journey, so as to get over all the rough and hilly ground before nightfall, that we might have a fair start in the morning. I generally preferred, if practicable, to lengthen the stage a little in the vicinity of watercourses or hills, in order to get the worst of the road over whilst the horses worked together and were warm, rather than leave a difficult country to be passed over the first thing in the morning, when, for want of exercise, the teams are chill and stiff, and require to be stimulated before they will work well in unison. Our journey to-day was about twenty miles, and the last five being over a rugged hilly road, it was late in the afternoon when we halted for the night.

"The reedy watercourse," is a chain of water-holes taking its rise among some grassy and picturesque ranges to the north of us, and trending southerly to a junction with the Broughton. Among the gorges of this range, (which I had previously named

Campbell's range,)* are many springs of water, and the scenery is as picturesque as the district is fertile. Many of the hills are well rounded, very grassy, and moderately well timbered even to their summits. This is one of the prettiest and most desirable localities for either sheep or cattle, that I have yet seen in the unoccupied parts of South Australia, whilst the distance from Adelaide by land, does not at the most exceed one hundred and twenty miles.† The watercourse near our camp took its course through an open valley, between bare hills on which there was neither tree nor shrub for firewood and we were constantly obliged to go half a mile up a steep hill before we could obtain a few stunted bushes to cook with. As the watercourse approached the Broughton the country became much more abrupt and broken, and after its junction with that river, the stream wound through a succession of barren and precipitous hills, for about fifteen miles, at a general course of south-west; these hills were overrun almost everywhere with prickly grass and had patches of the Eucalyptus dumosa scattered over them at intervals.

Up to the point where it left the hills, there were ponds of water in the bed of the Broughton, but upon leaving them the river changed its direction to the northward, passing through extensive plains and

* After R. Campbell, Esq. M. C. of Sydney.

† All this country, and for some distance to the north, is now occupied by stations.

retaining a deep wide gravelly channel, but without surface water, the drainage being entirely underground, and the country around comparatively poor and valueless.

CHAPTER III.

SPRING HILL—AN AGED NATIVE DESERTED BY HIS TRIBE—RICH AND EXTENSIVE PLAINS—SURPRISE A PARTY OF NATIVES—ROCKY RIVER—CRYSTAL BROOK—FLINDERS RANGE—THE DEEP SPRING—MYALL PONDS—ROCKY WATER HOLES—DRY WATERCOURSE—REACH THE DEPOT NEAR MOUNT ARDEN—PREPARE FOR LEAVING THE PARTY—BLACK SWANS PASS TO THE NORTH—ARRIVAL OF THE WATERWITCH.

During the night the frost had been so severe, that we were obliged to wait a little this morning for the sun to thaw the tent and tarpaulins before they would bend to fold up. After starting, we proceeded across a high barren open country, for about three miles on a W. N. W. course, passing close under a peak connected with Campbell's range, which I named Spring Hill, from the circumstance of a fine spring of water being found about half way up it.

Not far from the spring I discovered a poor emaciated native, entirely alone, without either food or fire, and evidently left by his tribe to perish there; he was a very aged man, and from hardship and want was reduced to a mere skeleton, how long he had been on the spot where we found him I had no means of ascertaining, but probably for some

time, as life appeared to be fast ebbing away; he seemed almost unconscious of our presence, and stared upon us with a vacant unmeaning gaze. The pleasures or sorrows of life were for ever over with him: his case was far beyond the reach of human aid, and the probability is that he died a very few hours after we left him.

Such is the fate of the aged and helpless in savage life, nor can we wonder that it should be so, since self-preservation is the first law of nature, and the wandering native who has to travel always over a great extent of ground to seek for his daily food, could not obtain enough to support his existence, if obliged to remain with the old or the sick, or if impeded by the incumbrance of carrying them with him; still I felt grieved for the poor old man we had left behind us, and it was long before I could drive away his image from my mind, or repress the melancholy train of thoughts that the circumstance had called forth.

From the summit of Spring Hill, I observed extensive plains to the N. W. skirted both on their eastern and western sides, by open hills, whilst to the N. W. and N. E. the ranges were high, and apparently terminated in both directions by peaked summits on their eastern extremes; a little south of west the waters of Spencer's Gulf were distinctly visible, and the smokes ascending from the fires of the natives, were seen in many directions among the hills. After passing Spring Hill, we crossed some

rich and extensive plains, stretching far away to the northward, and taking a nearly north and south direction under Campbell's range; in the upper part of these plains is the deep bed of a watercourse with water in it all the year round, and opposite to which, in lat. 33° 14′ S. is a practicable pass for drays through Campbell's range, to the grassy country to the eastward.

June 27.—In crossing the southern extremity of these large plains, we came suddenly upon a small party of natives engaged in digging yams of which the plains were full; they were so intent upon their occupation that we were close to them before they were aware of our presence; when they saw us they appeared to be surprised and alarmed, and endeavoured to steal off as rapidly as they could without fairly taking to their heels, for they were evidently either unwilling or afraid to run; finding that we did not molest them they halted, and informed us by signs that we should soon come to water, in the direction we were going. This I knew to be true, and about three o'clock we were in front of a watercourse, I had on a former journey named the "Rocky river," from the ragged character of its bed where we struck it.

We had been travelling for some distance upon a high level open country, and now came to a sudden gorge of several hundred feet below us, through which the Rocky river wound its course. It was a most singular and wild looking

place, and was not inaptly named by the men, the "Devil's Glen;" looking down from the table land we were upon, the valley beneath appeared occupied by a hundred little hills of steep ascent and rounded summits, whilst through their pretty glens, flowed the winding stream, shaded by many a tree and shrub—the whole forming a most interesting and picturesque scene.

The bed of the watercourse was over an earthy slate, and the water had a sweetish taste. Like most of the Australian rivers, it consisted only of ponds connected by a running stream, and even that ceased to flow a little beyond where we struck it, being lost in the deep sandy channel which it then assumed, and which exhibited in many places traces of very high floods. Below our camp the banks were 50 to 60 feet high, and the width from 60 to 100 yards, its course lay through plains to the south-west, over which patches of scrub were scattered at intervals, and the land in its vicinity was of an inferior description, with much prickly grass growing upon it.

Upwards, the Rocky river, after emerging from the gorges in which we found it, descended through very extensive plains from the north-north-east; there was plenty of water in its bed, and abundance of grass over the plains, so that in its upper parts it offers fine and extensive runs for either cattle or sheep, and will, I have no doubt, ere many years be past, be fully occupied for pastoral purposes.

From our present encampment a very high and pointed hill was visible far to the N.N. W. this from the lofty way in which it towered above the surrounding hills, I named Mount Remarkable. Our latitude at noon was 33° 25′ 26″ S.

A very beautiful shrub was found this afternoon upon the Rocky river, in full flower: it was a tall slender stalked bush, about six or eight feet high, growing almost in the bed of the river, with leaves like a geranium, and fine delicate lilac flowers about an inch and a half in diameter; here, too, we found the first gum-trees seen upon any of the watercourses for many miles, as all those we had recently crossed, traversed open plains which were quite without either trees or shrubs of any kind.

June 28.—This morning we passed through a country of an inferior description, making a short stage to a watercourse, named by me the "Crystal Brook;" it was a pretty stream emanating from the hills to the north-east, and marked in its whole course through the plains to the northward and westward by lines of gum-trees. The pure bright water ran over a bed of clear pebbles, with a stream nine feet wide, rippling and murmuring like the rivulets of England—a circumstance so unusual in the character of Australian watercourses, that it interested and pleased the whole party far more than a larger river would have done; this characteristic did not, however, long continue, for like all the streams we had lately crossed, the water

ceased to flow a short distance beyond our crossing place.

The country below us, like that through which the Rocky river took its course, was open and of an inferior description, but I have no doubt that by tracing the stream upwards, towards its source among the ranges, a good and well watered country would be found; I ascertained the latitude by a meridian altitude at Crystal brook to be 33° 18′ 7″ S.

The hills on the opposite side of Spencer's Gulf were now plainly visible, and one which appeared to be inland, I took to be the middle Back mountain of Flinders; between our camp and the eastern shores of the gulf, the land was generally low, with a good deal of scrub upon it, and nearer the shores appeared to be swampy, and subject to inundation by the tides.

June 29.—Upon moving from our camp this morning we commenced following under Flinders range. From Crystal brook, the hills rise gradually in elevation as they trend to the northward, still keeping their western slopes almost precipitous to the plains, out of which they appear to rise abruptly. Our course was much embarrassed by the gullies and gorges emanating from the hills, in some of which the crossing place was not very good, and in all the horses got much shaken, so that when we arrived at a large watercourse defined by gum trees, and in which was a round hole of water that had been on a former occasion called by me "The Deep

Spring," I halted the party for the night and found that the horses were a good deal fatigued. Fortunately there was excellent food for them, and plenty of water. The place at which we encamped was upon one of the numerous watercourses, proceeding from the gorges of Flinders range. It had a wide gravelly bed, divided into two or three separate channels, but without a drop of water below the base of the hills, excepting where we bivouacked, at this point, there was a considerable extent of rich black alluvial soil, and in the midst of it a mound of jet black earth, surrounded by a few reeds. In the centre of the mound was a circular deep hole containing water, and apparently a spring: the last time I was here, in 1839 it was full to overflowing, but now, though in the depth of winter, I was surprised and chagrined to see the water so much lower than I had known it before. It was covered up too so carefully with bushes and boughs, that it was evident the natives sometimes contemplated its being quite dried up,* and had taken this means as the best they could adopt for shading and protecting the water. On the other hand the numerous well beaten tracks leading to this solitary pool appeared to indicate that there was no other water in the neighbourhood. We saw kangaroos, pigeons and birds of various descriptions, going to it in con-

* In October 1842, I again passed this way, in command of a party of Police sent overland to Port Lincoln, to search for Mr. C. C. Dutton: the spring was then dried up completely.

siderable number. At night too after dark we found that a party of natives were watching also for an opportunity to participate in so indispensable a necessary, which having secured, they departed, and we saw nothing more of them. I observed the latitude at this camp to be 33° 7′ 14″ S. and the variation 8° 53′ E.

June 30.—Our road to day was much better, and less interrupted by gullies, though we still kept close under Flinders range. We traversed a great extent of plain land which was generally stony, but grassy, and tolerably well adapted for sheep runs. Several watercourses take their rise from this range, with a westerly direction towards the gulf, these were all dry when we crossed them, but their course was indicated by gum trees, and as some of the channels were wide and large, and had strong traces of occasional high floods, I rode for many miles down one of the most promising, but without being able to find a drop of water. At noon our latitude was 32° 59′ 8″, S.

Late in the afternoon we reached a watercourse, which I had previously named "Myall Ponds," from the many and beautiful Acacia pendula trees that grew upon its banks. There I knew we could get water, and at once halted the party for the night. Upon going to examine the supply I was again disappointed at finding it so much less than when

* Myall is in some parts of New Holland, the native name for the Acacia pendula.

I had been here in 1839. This did not augur well for our future prospects, and gave me considerable anxiety relative to our future movements.

For some days past the whole party had fully entered upon their respective duties, each knew exactly what he had to do, and was beginning to get accustomed to its performance, so that every thing went on smoothly and prosperously. My own time, when not personally engaged in conducting the party, was occupied in keeping the journals and charts, &c. in taking and working observations—in the daily register of the barometer, thermometer, winds, and weather, and in collecting specimens of flowers, or minerals. My young friend, Mr. Scott, was kept equally busy; for in many of these duties he assisted me, and in some relieved me altogether; the regular entry of the meteorological observations, and the collecting of flowers or shrubs generally fell to his share; independently of which he was the only sportsman in the party, and upon his gun we were dependant for supplies of wallabies, pigeons, ducks, or other game, to vary our bill of fare, and make the few sheep we had with us hold out as long as possible. As a companion I could not have made a better selection—young, active, and cheerful, I found him ever ready to render me all the assistance in his power. At our present encampment, several of a species of wallabie, very much resembling a hare in flavour, were shot by Mr. Scott, but

hitherto we had not succeeded in getting a kangaroo.

July 1.—To-day we travelled through a similar country to that we were in yesterday, consisting of open plains and occasionally low scrub. Kangaroos abounded in every direction. Our stage was eighteen miles to a watercourse called by me the "Reedy water holes," from the circumstance of reeds growing around the margin of the water. Upon arriving at this place I was surprised to find a strongly running stream, where formerly there had only been a reedy pond, although the two last watercourses we had encamped at had been much reduced and dried up. When I had been here in 1839, they were the running streams, and this only a pool, whilst singularly enough there did not appear to have been more rain at one place than the other.

We were now in full view of Spencer's gulf, but as yet could observe no signs of the Waterwitch, which was to meet us at the head of the gulf with additional stores. At night I observed the latitude by altitude of à Bootis to be 32° 41′ 28″ S.

July 2.—We moved on for 15 miles over extensive plains, covered principally with Rhagodia, and in some places stony, and halted early in the afternoon at a large dry watercourse, coming out from Flinders range. Though there was no water in this channel below the base of the hill, on sending a party a mile and a half up it with spades and buckets, we got, by digging in the gravelly bed,

as much as sufficed for ourselves and horses. At this camp I observed the variation to be 7° 24′ E.

July 3.—During the night our horses had rambled a little, so that we could not get away early, and as we had a long stage before us we were obliged to push on to a late hour. At dark we arrived at my former depôt near Mount Arden, and took up our old position in the dry bed of the watercourse, at the base of the hills from which it emanated; but we had still to send the horses a mile and a half further up the gorge, over a hilly and stony road, before we could either get water for ourselves or them; it was therefore very late when the men returned, and the whole party were a good deal fatigued, having travelled from Adelaide to Mount Arden in 14 days, (deducting the two days in camp at the Light.) I now ascertained the latitude of the depôt to be 32° 14′ S.

July 4.—Having mustered the horses this morning, I ordered an arrangement to be entered into for taking them to the water twice a day, and bringing down the supply required for the use of the party. Each person undertook this duty in turn, and thus the labour was divided. After breakfast I went up myself to examine the state of the water and found great abundance in its bed; there were strong traces of recent and high flooding, the drift timber being lodged among the bushes several feet above the ordinary channel. The grass I was sorry to find was rather old and dry, but still there was a

very fair supply of it, a point of great importance to us at a time when it was necessary to detain the whole party for two or three weeks in depôt, to enable me to examine the country to the north; my former experience having convinced me that it would be dangerous to attempt to push on, before ascertaining where grass and water could be procured.

We had now travelled upwards of eighty miles under Flinders range, from Crystal brook to Mount Arden, and hitherto the character of that range had varied but little. High, rocky, and barren, it rises abruptly from the plains, and so generally even is the country at its base, that we had no difficulty in keeping our drays within a mile or two of it. This was convenient, because we had not far to leave our line of route, when compelled to send up among the ravines for water. The slopes of Flinders range are steep and precipitous to the westward, and composed principally of an argillaceous stone or grey quartz, very hard and ringing like metal when struck with a hammer.

There was no vegetation upon these hills, excepting prickly grass, and many were coated over so completely with loose stones that from the steepness of the declivity it was unsafe, if not impossible to ascend them. At one or two points in our route I climbed up to the top of high summits, but was not rewarded for my toil, the prospect being generally cheerless and barren in the extreme, nor did

the account given by Mr. Brown of his ascent of Mount Brown in March 1802, tempt me to delay a day to enable me to view the uninteresting prospect he had seen from the summit of that hill—by far the highest peak in this part of Flinders range.

Having decided upon ridingon a head of my party to reconnoitre, as soon as the Waterwitch should arrive, I at once commenced my preparations, and made the overseer put new shoes on the horses I intended to take with me. The very stony character of the country we had been lately traversing and the singularly hard nature of the stone itself, had caused the shoes to wear out very rapidly, and there was hardly a horse in the teams that did not now require new shoes; fortunately we had brought a very large supply with us, and my overseer was a skilful and expeditious farrier. At dusk a watch was set upon one of the hills near us, to look out for signals from the Waterwitch in the direction of Spencer's gulf, but none were seen.

July 4.—Whilst writing in my tent this evening, my attention was attracted by the notes of swans, and upon going out I perceived a flight of several of the black species coming up from the southward; when they had got over the tents, they appeared to be alarmed and wheeled to the eastward, but soon returning, they took a nearly due northerly course. This was encouraging for us, and augured well for the existence of some con-

siderable body of water inland, but we hoped and expected that a few days would perhaps give us a clue to the object of their flight.

Sunday, July 5.—A day of rest to all. In the afternoon I employed myself in writing out instructions for the overseer during my absence, as also for the master of the Waterwitch, for whose arrival we now kept a constant and anxious look out. In the evening about eight o'clock the sentinel on the hill reported a fire on the opposite side of Spencer's gulf. Upon receiving this intelligence I had blue lights exhibited, and rockets fired, which in a little time were replied to by rockets from the gulf and the lighting up of a second fire on shore assuring me at once of the safe arrival of the cutter.

CHAPTER IV.

MAKE ARRANGEMENTS FOR GETTING UP STORES FROM THE WATERWITCH—LEAVE THE PARTY—SALT WATERCOURSE—MOUNT EYRE—ASPECT OF THE COUNTRY—LAKE TORRENS—RETURN TOWARDS THE HILLS—NATIVE FEMALE—SALINE CHARACTER OF THE COUNTRY—MOUNT DECEPTION—REACH THE EASTERN HILLS—LARGE WATERCOURSES—WATER HOLE IN A ROCK—GRASSY BUT HILLY COUNTRY—RUNNING STREAM—ASCEND A RANGE—RETURN HOMEWARDS—DECAY OF TREES IN THE WATERCOURSES—SHOOT A KANGAROO—ARRIVE AT THE DEPOT—BURY STORES—MAKE PREPARATIONS FOR LEAVING—SEND DESPATCHES TO THE VESSEL.

July 6.—Being anxious to pursue my explorations, and unwilling to lose another day solely for the purpose of receiving my letters, I sent down my overseer to arrange about getting our stores up from the vessel, which was about fourteen miles away, and to request the master to await my return from the north, and in the interval employ himself in surveying and sounding some salt water inlets, we had seen on the eastern shores of the gulf in our route up under Flinders range.

Having made all necessary arrangements and

wished Mr. Scott good bye, I set off on horseback with the eldest of my native boys, taking a pack horse to carry our provisions, and some oats for the horses. After rounding a projecting corner of the range we passed Mount Arden, still traversing open plains of great extent, and very stony. In some of these plains we found large puddles of water much discoloured by the soil, so that it was evident there had been heavy rains in this direction, though we had none to the southward.

After travelling twenty-four miles we came to a large watercourse winding from Flinders range through the plains, with its direction distinctly marked out by the numerous gum-trees upon its banks. This was the "salt watercourse" of my former journeys so called from the large reaches of salt water in its bed a mile or two among the hills. By digging in the gravelly bed of the channel, where the natives had scooped a small hole, we got some tolerable water, and were enabled to give as much as they required to our horses, but it was a slow and tedious operation. We could get very little out at once, and had to give it to them to drink in the black boy's duck frock, which answered the purpose of a bucket amazingly well.

There was not a blade of grass, or anything that the horses could eat near this creek, so I was obliged to tie them up for the night, after giving to each a feed of oats.

July 7.—Towards morning several showers of rain

fell, and I found that I had got a severe attack of rheumatism, which proved both troublesome and painful. Pushing on for ten miles we reached the height standing out from the main range which Colonel Gawler named Mount Eyre, from its having been the limit of my first journey to the north in May 1839. This little hill is somewhat detached, of considerable elevation, and with a bold rocky overhanging summit to the southward. Having clambered to the top of it, I had an extensive view, and took several bearings.

The region before us appeared to consist of a low sandy country without either trees or shrubs, save a few stunted bushes. On the east this was backed by high rugged ranges, very barren in appearance, and extending northward as far as the eye could reach, beyond this level country to the West, and stretching far to the north-west, appeared a broad glittering stripe, looking like water, and constituting the bed of Lake Torrens. The lake appeared to be about twenty-five miles off, and of considerable breadth ; but at so great distance, it was impossible to say whether there was actually any water in it or not.

Having completed my observations we descended again to the plains steering north-west for the lake. At two miles from Mount Eyre we found a puddle of water in the midst of the plains, and halted at it for the night. Our horses had good grass, but would not touch the water, which was ex-

tremely thick and muddy. Upon trying it ourselves we found it was not usable, even after it had been strained twice through a handkerchief, whilst boiling only thickened it; it was a deep red colour, from the soil, and was certainly an extraordinary and unpalatable mixture.

July 8.—Our horses having strayed this morning I sent the native boy to look for them, but as he did not return in a reasonable time, I got anxious and went after him myself, leaving the saddles and provisions at our sleeping place. In about four miles I met the boy returning with the runaways, which had rambled for several miles, though they had abundance of good feed around the camp; fortunately we found every thing safe when we got back, but if any natives had accidentally passed that way we should probably have lost everything, and been left in very awkward predicament.

This is a risk I have frequently been obliged to incur, and is one of the inconveniences resulting from so small a number as two travelling alone; it it is not always practicable from want of grass to tether the horses, and frequently when they are tethered the ropes break, and occasion the necessity of both individuals leaving the encampment to search for them at the same time.

Moving on to the N. W. by N. we passed over heavy sandy ridges, with barren red plains between, and in one of the latter we found a puddle of rain water, this upon tasting, I found to be

rather saline from the nature of the soil upon which it lay, the horses, however, drank it readily, and we put some in a small keg for ourselves. The only vegetation to be seen consisted of a few small stunted trees and shrubs, and even these as we approached the vicinity of the lake disappeared altogether, and gave place to Salsolaceous plants, the country being open and barren in the extreme.

I found Lake Torrens completely girded by a steep sandy ridge, exactly like the sandy ridges bounding the sea shore, no rocks or stones were visible any where, but many saline coasts peeped out in the outer ridge, and upon descending westerly to its basin, I found the dry bed of the lake coated completely over with a crust of salt, forming one unbroken sheet of pure white, and glittering brilliantly in the sun. On stepping upon this I found that it yielded to the foot, and that below the surface the bed of the lake consisted of a soft mud, and the further we advanced to the westward the more boggy it got, so that at last it became quite impossible to proceed, and I was obliged to return to the outer margin of the lake without ascertaining whether there was water on the surface of its bed further west or not.

The extraordinary deception caused by mirage and refraction, arising from the state of the atmosphere in these regions, makes it almost impossible to believe the evidence of one's own eyesight; but as far as I could judge under these circumstances, it

appeared to me that there was water in the bed of the lake at a distance of four or five miles from where I was, and at this point Lake Torrens was about fifteen or twenty miles across, having high land bounding it to the west, seemingly a continuation of the table land at the head of Spencer's gulf on its western side.

Foiled in the hope of reaching the water, I stood gazing on the dismal prospect before me with feelings of chagrin and gloom. I can hardly say I felt disappointed, for my expectations in this quarter had never been sanguine; but I could not view unmoved, a scene which from its character and extent, I well knew must exercise a great influence over my future plans and hopes: the vast area of the lake was before me interminable as far as the eye could see to the northward, and the country upon its shore, was desolate and forbidding.

It was evident, that I could never hope to take my party across the lake, and it was equally evident, that I should not be able to travel around its shores, from the total absence of all fresh water, grass, or wood, whilst the very saline nature of the soil in the surrounding country, made even the rain water salt, after lying for an hour or two upon the ground. My only chance of success now lay in the non-termination of Flinders range, and in the prospect it held out to me, that by continuing our course along it we might be able to procure grass and water in its recesses, until we were either taken

beyond Lake Torrens, or led to some practicable opening to the north.

With a heavy heart I turned towards the mountains, and steering N. E. for ten miles, halted at dark, where there was nothing for our horses to eat or drink, and we were consequently obliged to tie them up for the night. We had still a few oats left and gave each horse three pints. A short time before encamping, I had observed that Lake Torrens was trending more to the eastward, and that when we halted, it was not at any very great distance from us.

July 9.—One of our horses having got loose last night, pulled the cork out of the keg in which was our small stock of the dirty brackish water we had found yesterday, and rolling the keg over, destroyed its contents; we were thus deprived of our breakfasts, and consequently had but little delay in starting. I intended to push on steadily for the hills, but after travelling six miles came to a puddle in the plains, with tolerable grass around, and at this I halted for the day, to rest the horses. Our latitude was 31° 25′ S. by an altitude of Arcturus, Mount Eyre then bearing S. 7° E.

July 10.—Our horses being much recruited I altered our course to-day to N. 5° E. being the bearing of the most distant range to the northward, (subsequently named Mount Deception). We passed for the first ten miles through an open barren country, but found a puddle at which we watered

our horses, and refilled the keg; we then entered heavy ridges of dense red sand lying nearly north and south, and having small barren plains between.

There were a few stunted bushes upon the ridges and occasionally some small straggling pines. Lake Torrens still trended easterly, being occasionally seen from, and sometimes approaching near to our track.

Emerging from the sandy ridges we again entered upon vast level plains covered with rhagodia. In the midst of these we came to the bed of a large dry watercourse, having good grass about it, but containing no water. I halted here for the day as our horses were not very thirsty.

Upon examining the bed of the watercourse, I found traces of a rather recent and high flood; much drift being still left upon the bushes where it had been swept by the torrent; I could, however, find no water anywhere.

A great many emus were seen during our ride, and I wounded one with my rifle, but did not get it. We found to-day a description of flower, which I had not seen before, white, and sweetly scented like the hawthorn, growing upon a low prickly bush near the watercourse.

July 11.—To-day I left our course and rambled up the watercourse to examine its character and search for water, which however I could not find in its channel anywhere. Traces of natives were numerous and recent all the way as we went, till at last

we came to where they had encamped the previous night, and where they had left a fire still fresh and burning.

Proceeding onwards we came upon a single native, a female, young, but miserably thin and squalid, fit emblem of the sterility of the country. We could gain no information from her, she was so much alarmed, but not long after parting with her we came to a puddle of water in the plains, and encamped for the night. Our stage had been a tortuous, but not a long one, and we halted early in the day, the latitude was 30° 58′ S. by an altitude of the sun at noon.

After taking some refreshment, I walked to a rise about three miles off at N. 40° E. from which I took several bearings, and among them I set Mount Deception at N. 25° W., I then examined several of the gorges between the front hills, where the banks were broken away, and to my great dismay found in all of them salt mixed with the sand, the clay, and even the rocks ; whilst in the bed of the watercourse, the salt water tea-tree was making its appearance, a shrub I had never before seen under Flinders range, and one which never grows where the soil is not of a very saline nature, and generally only where the water is too brackish for use.

The beds of the watercourses were in some places quite white and glazed with encrustations of salt, where the rains had lodged, and the water had evaporated. Some of the cliffs which I examined pre-

sented sections of 40 and 50 feet perpendicular height, in which layers of salt were embedded from the very top to the bottom.

In such a country, what accommodation could I expect, or what hopes could I entertain for the future, when the very water shed from the clouds would not be drinkable after remaining a few hours on the ground? Whichever way I turned myself, to the West, to the East, or the North, nothing but difficulties met my view.

In one direction was an impracticable lake, skirted by heavy and scrubby sand ridges; in another, a desert of bare and barren plains; and in a third, a range of inhospitable rocks. The very stones lying upon the hills looked like the scorched and withered scoria of a volcanic region; and even the natives, judging from the specimen I had seen to-day, partook of the general misery and wretchedness of the place.

My heart sank within me when I reflected upon the gradual but too obvious change that had taken place in the character of the country for the worse, and when I considered that for some days past we had been entirely dependent for our supply of water upon the little puddles that had been left on the plains by the rain, and which two or three more days would completely dry up. Under circumstances so unpropitious, I had many misgivings, and the contemplation of our future prospect became a subject of painful anxiety.

July 12.—We moved away early, steering for Mount Deception. Near its base, and emanating from it, we crossed the dry bed of a very large watercourse, more resembling that of a river in character, its channel being wide, deep, and well-defined, and lined with the salt-water tea-tree; whilst its course was marked by very large, green-looking gum-trees, the bed consisted of an earthy, micaceous slate of a reddish colour, and in very minute particles, almost in some places as fine as sand, but we could find no water in it anywhere.

The range in which this watercourse has its source, is of the same slaty rock, and very rugged; it could not be less than 3,000 feet in elevation, and its summit was only attainable by winding along the steep and stony ridges that led round the deep gorges and ravines by which it was surrounded.

From the top the view was extensive and unsatisfactory. Lake Torrens appearing as large and mysterious as ever, and bearing in its most northerly extreme visible W. 22° N. To the north was a low level cheerless waste, and to the east Flinders range trending more easterly, and then sweeping back to N. 28° W. but its appearance seemed to be changing and its character altering; the ranges struck me as being more separated by ridges, with barren flats and valleys between, among which winding to the N. W. were many large and deep watercourses, but which when traced up, often for many miles, I found to emanate from gorges of the hills, and to have neither water nor springs in them.

I had fully calculated upon finding permanent water at this very high range, and was proportionally disappointed at not succeeding, especially after having toiled to the summit, and tired both myself and horses in tracing up its watercourses. There was now no other alternative left me, than to make back for the hills to the eastward, in the hope of being more fortunate there. I had only found permanent water once, (at Salt watercourse) since I left my party, having depended entirely upon puddles of rain water for subsistence; but it now became imperative on me to turn my attention exclusively to this subject, not only to enable me to bring up my men, but to secure the possibility of my own return, as every day that passed dried up more and more the small puddles I had found in the plains.

Descending Mount Deception, we travelled five miles upon a S. E. course, and encamped upon a small dry watercourse for the night, with good grass for our horses, but without water.

July 13.—Bending our steps backwards, to search for water in the eastern hills, we were lucky enough to fall in with a puddle in the plains, at which we watered our horses, and again proceeded.

Selecting one of the larger watercourses running out from the hills, we traced it up a considerable distance, examining all its minor branches carefully, and sparing no pains in seeking a permanent spring of water; the channel, however, gradually diminished

in size, as we occasionally passed the junctions of small branches from the various gorges; the gum-trees on its course were either dead or dying; the hills, which at a distance had appeared very rugged and lofty, upon a nearer approach turned out to be mere detached eminences of moderate elevation, covered with loose stones, but without the least sign of water.

About two o'clock, P.M. we passed a little grass, and as the day appeared likely to become rainy, I halted for the night. Leaving the native boy to hobble the horses, I took my gun and ascended one of the hills near me for a view. Lake Torrens was visible to the west, and Mount Deception to the N.W. but higher hills near me, shut out the view in every other direction. In descending, I followed a little rocky gully leading to the main watercourse, and to my surprise and joy, discovered a small but deep pool of water in a hole of the rock: upon sounding the depth, I found it would last us some time, and that I might safely bring on my party thus far, until I could look for some other point for a depôt still farther north; the little channel where the water was, I named Depôt Pool.

Regaining the camp, I immediately set to work with the native boy to construct a bough hut, as the weather looked very threatening. We had hardly completed it before the rain came down in torrents, and water was soon laying every where in

the ledges of rock in the bed of the watercourse. So little do we know what is before us, and so short a time is necessary to change the aspect of affairs, and frequently too, when we least expect it!

July 14.—Our hut not having been quite watertight before the rain came, we got very wet during the night, and turned out early this morning to go and hunt for firewood to warm ourselves.

As the weather still continued rainy, I determined to give our horses a day's rest, whilst I walked up the watercourse to examine it farther. I found the hills open a good deal more as I proceeded, with nice grassy valleys between; and the hills themselves, though high and steep, were rounded at the summits, and richly clothed with vegetation: among them numerous watercourses took their rise in the gorges, and generally these were well marked by gum-trees. Altogether it was a pretty and fertile spot, and though very hilly, would do well for stock, if permanent water could be found near. I was quite unsuccessful, however, in my search for this, and the native boy, whom I sent in the opposite direction, after my return, was equally unfortunate. Towards evening, one of the horses having broken his hobbles, and got alarmed, galloped off, taking the other with him. Tired and wet as I was, I was obliged to go after them, and it was some miles from the camp, before I could overtake and turn them back. Our latitude was 30° 55′ S.

July 15.—This morning was misty and cloudy,

and dreadfully cold. We set off early and commenced tracing up and examining as many of the watercourses as we could; we did not, however, find permanent water.

Under one low ridge we met with what I took to be a small spring emanating from a limestone rock; but it was so small as to be quite useless to a party like mine, though the natives appeared frequently to have resorted to it. Finding the courses of the main channel become lost in its many branches, I ascended the dividing ridge, and crossed into the bed of another large watercourse, in which, after travelling but a short distance, I found a fine spring of running water among some very broken and precipitous ranges, which rose almost perpendicularly from the channel; in the latter, high ledges of a slaty rock stretched occasionally quite across its bed, making it both difficult and dangerous to get our horses along. In the vicinity of the water the grass was tolerably good, but the declivities upon which it principally grew, were steep and very stony.

Having hobbled the horses, I took my gun, and walked down the watercourse, to a place where it forms a junction with a larger one, but in neither could I find any more water. Upon my return, I found that the native boy had caught an opossum in one of the trees near, which proved a valuable addition to our scanty and unvaried fare. The latitude to-day was 30° 51′ S.

Drawn by S. Gill

Opossum hunting near Goulburn Plains

ROYAL ASIATIC SOCIETY OF THE BOMBAY BRANCH

July 16.—Tracing down the watercourse we were encamped on, to the junction before mentioned, I steered a little more to the north, to ascend a high stony range, from which I hoped to obtain a view to the eastward; but after considerable toil in climbing, and dragging our horses over loose rolling stones, which put them constantly in danger of falling back, I was not rewarded for the trouble I had taken: the view to the east was quite shut out by high rugged ranges of ironstone and quartz, whilst to the north, the hills appeared lower and more open.

It now became a matter of serious consideration, whether I should pursue my researches any farther at present. I was already about 120 miles away from my party, with barely provisions enough to last me back; and the country, in advance, appeared to be getting daily more difficult; added to this, the "Waterwitch" was waiting at the head of Spencer's Gulf for my return.

After reflecting on my position, I decided to rejoin my party without delay; and descending the range to the S. E., I steered for a large watercourse we had crossed in the morning; intending to trace it up, for the purpose of examining its branches. The bed of this watercourse, at first, was very wide, and lined with gum-trees; but as I advanced, I found its channel became contracted, and very rocky, the gum-trees disappearing, and giving place to the salt-water tea-tree. By nightfall, I was unable to

proceed any further, owing to the large stones and rocks that interposed themselves. Retracing my steps, therefore, for a mile or two, to a little grass I had observed as I passed by, I bivouacked for the night, being, as well as the horses, quite knocked up. The native boy, who accompanied me, was equally fatigued; and we were both lame from walking across so rugged a country, over a great portion of which we found it quite impracticable to ride. Our stage could not have been less than twenty-five or twenty-six miles during the day, yet we had not met with a drop of water, even though we had high ranges, large watercourses, and huge gum-trees on every side of us. As usual, the traces of high floods were numerous; and the channels of these watercourses, confined as they are by precipitous ranges, must, at times, be filled by rapid and overwhelming torrents, which would collect there after heavy rains.

Some great progressive change appears to be taking place in the climate and seasons of this part of the country, as, in many of the watercourses, we found all the gum-trees either dying or dead, without any young trees growing up to replace them. The moisture which had promoted their growth, and brought them to maturity, existed no longer; and in many places, only the wreck of noble trees remained to indicate to the traveller what once had been the character of this now arid region. In other watercourses the gum-trees were still green and

flourishing, and of giant growth; but we were equally unable to discover water in these,* as in those where the trees were decaying or withered.

July 17.—To-day we returned to our temporary camp, tracing up various branches of the watercourses as we went along, but without finding water. Many of the ranges in our route consisted of masses of ironstone, apparently containing a very large proportion of metal. In one place, I found a mineral which I took to be tin ore; the loss, however, of all the geological specimens I collected, after their arrival in Adelaide, has unfortunately put it now beyond my power to test any of the rocks or minerals, about which I was doubtful. As we encamped early, and I was desirous of recruiting the horses, I employed myself in taking an observation for latitude, whilst the black boy went out to look for an opossum. He succeeded in bringing in a fine large one, which formed a welcome addition to our meagre fare. The nights were still very frosty.

July 18. — In travelling to "Depôt Pool," the native boy caught another opossum, and we again halted early in the day for the sake of resting the horses.

July 19.—Concealing among some rocks every thing we did not absolutely require, we descended towards the plains, searching as we went, for the most favourable line of road to them, for the

* We had no means with us of digging—possibly moisture existed below the surface where the trees were so large and green.

drays, but at best the country was very rough and stony.

After clearing the hills, we made a stage of twenty-eight miles along the plains running under Flinders range, and at night encamped upon a channel coming out of it, where we obtained water, but very little grass for our horses.

July 20.—To-day I kept behind some of the low front hills, passing through some extensive valleys between them and the main range; and as I found abundance of water lying in pools upon the plains, I did not make for the hills at all.

Before sunset, I got a shot at a kangaroo with my rifle, which, though severely wounded, gave me a long chase before I could capture it; this furnished us with a welcome and luxurious repast. We had been so long living upon nothing but the bush baked bread, called damper (so named, I imagine, from its heavy, sodden character), with the exception of the one or two occasions upon which the native boy had added an opossum to our fare, that we were delighted to obtain a supply of animal food for a change; and the boy, to shew how he appreciated our good luck, ate several pounds of it for his supper. Our horses were equally fortunate with ourselves, for we obtained both good grass and water for them.

July 21.—Taking with us the best part of what was left of the kangaroo, we crossed a stony ridge to the S. W., and at four miles struck a watercourse

with a large pool of water in its bed, and well adapted for a halting place for the party on their route to the north: we had not seen this in our outward course, having kept further to the westward in the plains. From the water-hole, Mount Eyre bore W. 30° S. distant five miles.

Upon leaving this pool I pushed on as rapidly as I could, being anxious to rejoin my party; and after a hard and fatiguing ride of forty miles, arrived at the depôt under Mount Arden, late in the day, having been absent sixteen days. I had been anxiously expected, and was cordially welcomed by the whole party, who were getting sadly tired of inactivity, and especially by my young friend Mr. Scott, whose eager and ardent disposition rendered him quite uneasy under the confinement and restraint of a depôt encampment; he would gladly have shared with me the difficulties and hazards of exploring the country in advance, but from the very embarrassing nature of the undertaking, I did not think it right to take more than a single native with me, as every addition to the number of a party, on such occasions, only tends to increase the difficulty and anxiety of the task.

Having rested a little, and made innumerable inquiries, I was very much gratified to find that the whole party were in good health, and that every thing had been conducted in a satisfactory manner during my absence. No one had been idle, and every thing that I could have wished, had been properly arranged. The stores had been safely brought

up from the Waterwitch, including a barometer kindly sent by the Governor, and a large packet of English letters, at any time a highly valued prize, and not the less so now that they were received 200 miles in the interior, amidst the labours and anxieties of an exploring expedition.

During my absence all the harness, hobbles, tents, tarpaulins, &c. had been fully repaired; and according to my instructions, a large deep hole had been dug in the slope of the hill, to bury a portion of the stores in, that if compelled by circumstances to return from the north, we might still have supplies to fall back upon. Mr. Scott had employed his time in collecting botanical and geological specimens, and had already made a very fair commencement for our collections in both these departments of science. He had also regularly kept the meteorological journal, registering the observations three times in each day.

July 22.—After breakfast I had all the stores reweighed, and examined the supplies sent us in the Waterwitch, which consisted chiefly of flour, biscuit, sugar, tea, salt pork, soap, tobacco, salt, canvas, &c. besides many little luxuries which the kindness of the Governor, and the consideration of our many friends had added to the list.

The men during my absence, having been living entirely upon salt pork, to economize the sheep, were glad to receive the kangaroo which I brought home with me.

Having inspected the stores, the whole party were

put upon their travelling rations, and the first week's allowance was issued to each, consisting of ten pounds of meat, seven pounds of biscuit or flour, a quarter of a pound of tea, a pound and a half of sugar, a quarter of a pound of soap, and the same quantity of tobacco.

Provisions of different kinds were then weighed out, headed up in casks, and buried in the hole dug by the men during my absence, to wait our return, if ever it should be our lot to reach the place again. The remainder were all properly packed up, and the drays loaded and arranged for moving on.

After satisfactorily concluding all the preparations for leaving the depôt, I employed myself busily in writing letters and despatches until a very late hour of the night, as it was the last opportunity I should have for a long time, of reporting our prospects and progress, or of thanking the Governor and our numerous friends, for the many attentions we had experienced.

I had hardly retired to rest before I was suddenly seized with a violent attack of illness, arising probably from cold and over-exertion, now that a return to my party had removed the stimulus to activity, and permitted a reaction in the system to take place.

July 23.—This morning I felt weak, and still very ill, and it was with great difficulty I could manage to close my letters, and give the necessary instructions to the overseer, whom I sent down to the head of Spencer's Gulf, with orders to the

master of the cutter to sail for Adelaide, and to report what he had seen at the salt inlets in the east side of Spencer's Gulf, which I had directed him to examine in the boats whilst I was absent exploring to the north. His reply was, that there was water enough for a ship to lie within one mile of the shore, that there was a tolerable landing place, but that he had found no fresh water. The men were employed during the day making a new tarpaulin from the canvas sent up in the Waterwitch. The following is a copy of the Report sent to the Governor, and to the Chairman of the Committee for promoting the expedition.

"*Depôt, near Mount Arden,*
July 22nd, 1840.

"Sir,—I have the honour to acquaint you for the information of His Excellency the Governor, and of the colonists interested in the northern expedition, with the progress made up to the present date.

"I arrived here with my party all well, on the 3rd July instant, and on the 6th I proceeded, accompanied by one of my native boys, on horseback, to reconnoitre Lake Torrens and the country to the north of the depôt, leaving the party in camp to rest the horses and enable the overseer to get up, from the head of Spencer's Gulf, the supplies kindly sent by His Excellency the Governor in the *Waterwitch*—her arrival having been signalised the evening previous to my leaving. I arrived on the shores of Lake Torrens the third day after leaving the depôt, and have ascertained that it is a basin of considerable magnitude, extending certainly over a space varying in width from 15 to 20 miles, and with a length of from 40 to 50, from its southern extremity, to the most northerly part of it, visible from a high

summit in Flinders range, (about ninety miles north of Mount Arden). The lake is girded with an outer ridge of sand, covered with salsolaceous plants, and with saline crusts, shewing above the ground at intervals. Its waters appear to extend over a considerable surface, but they are, seemingly, shallow. I could not approach the water, from the soft nature of that part of its bed, which is uncovered, and which appeared to reach from three to four miles from the outer bank to the water's edge. There can be no doubt, however, of its being very salt, as that portion of its bed which lay exposed to our view was thickly coated with pungent particles of salt. There were not any trees or shrubs of any kind near the lake where we made it, nor could either grass or fresh water be procured for our horses. Lake Torrens is bounded on its western side by high lands—apparently a continuation of the table land to the westward of the head of Spencer's Gulf.—I should think that it must receive a considerable drainage from that quarter, as well as the whole of the waters falling from Flinders range to the eastward.

"From the very inhospitable nature of the country, around the lake, I could not examine it so carefully or so extensively as I could have wished. My time, too, being very limited, made me hurry away to the northward, to search for a place to which I might bring on my party, as the grass in the neighbourhood of the depôt was very old, and much less abundant than on either of my former visits there. It became, therefore, imperative on me to remove the horses as speedily as possible. Should circumstances permit, I shall, however, endeavour to visit Lake Torrens again, on my return from the northern interior. After leaving the lake I spent many days in examining the country to the northward of our depôt. Its character seemed to vary but little; barren sandy plains still formed the lower level, and the hills constituting the continuation of Flinders range were still composed of quartz and ironstone; they were, however, gradually becoming less elevated and more detached, with intervals of stony valleys between, and the whole country was, if possible, assuming a more barren aspect, while the springs, which had heretofore been numerous

among the hills, were very few in number—difficult to find—and very far in amongst the ranges. After most anxious and laborious search, I at last succeeded in finding a place about ninety miles (of latitude) north of Mount Arden, to which I can remove my depôt, and from which I can again penetrate more to the northward.

"After an absence of sixteen days I rejoined my party under Mount Arden on the evening of the 21st July, and found they had safely received all the supplies sent for our use by the *Waterwitch*. The latter has been detained until my return, for despatches, which I shall send down to-morrow, and on the 24th I intend to move on with my party to the new depôt. I regret it is not in my power to afford more certain information as to the future prospects of the expedition, but where so little alteration has taken place, in the features of the country I have been examining, conjectures alone can anticipate what may be beyond. From the very difficult nature of the country we are advancing into, our further progress must necessarily be very slow for some time, but I still hope that by patience and perseverance we shall ultimately succeed in accomplishing the object of the expedition.

"I have the honour to be, Sir,

"Your most obedient humble Servant,

"EDWARD JOHN EYRE."

"*To the Chairman of the Committee of Colonists for promoting the Northern Expedition.*"

"*Depôt, near Mount Arden, July 22nd*, 1840.

"My dear Sir,—I beg to enclose a copy of the report of our proceedings up to the present date, for the perusal of his Excellency the Governor. By it his Excellency will perceive that the

very inhospitable nature of the country around Lake Torrens, added to my anxiety to remove our horses from the depôt near Mount Arden, where there was but very little grass for them, prevented my devoting so much time to the examination of the lake and the country around it, as I should have wished; and I therefore intend, if possible, on my return, to investigate it more fully, being anxious to ascertain, whether, as I suppose, there is a considerable drainage into it from the westward. The high land seen on its opposite side, appears to be a continuation of the table land, lying to the west of the head of Spencer's Gulf; and though the fall of the country *appears* to be to the north, I begin to be of opinion now that it is not in reality. Lake Torrens is evidently the basin into which all the waters from Flinders range fall, and its extent is very considerable; in fact, where I last saw it to the north, it was impossible to say whether it terminated or not, from the very great distance it was off. The country lying between Flinders range on the one side, and the table land on the other, and north of Spencer's Gulf, is of so low and so level a character that the eye alone is not a sufficient guide as to the direction in which the fall may be. On my previous visits, I felt convinced it was northerly, but I am now inclined to think that the drainage from Lake Torrens in seasons of wet, is to the south, into the head of the Gulf; and I can only account for there not being a larger connecting water-course than the small shallow one found when crossing from Streaky Bay—and which I did not then imagine extended far above the head of the Gulf—by supposing that the seasons have so altered of late years that the overflow of the lake has never been sufficient to cause a run of water to the Gulf. Should my present supposition be correct, the idea of a northerly drainage is done away with, and we have yet to come to a "division of the waters." My uncertainty on this most important point has made me most anxious to get my party removed to a place where they can remain until I can decide so interesting a point, and one on which our future prospects so much depend. The same causes that prevented my staying a little longer in the neighbourhood of

the Lake have also prevented, as yet, my extending my researches to the north for more than about forty miles farther than I had been when last in this neighbourhood. The only change I observed, was the increasing barren appearance of the country —the decrease in elevation of the ranges—their becoming more detached, with sterile valleys between—and the general absence of springs; the rock of the higher ridges, which were very rugged and abrupt, was still the same, quartz and ironstone, but much more of the latter than I had before seen, and, in some cases, with a very great proportion of metal to the stone. The lower ridges and steep banks, when washed away by the rains, presented great quantities of a very pungent salt to the eye of the observer, mixed with the clay and sand of which the banks were formed; and in this neighbourhood the watercourses were (though dry) all lined with the salt-water tea-tree—a shrub we had never before seen under Flinders range. My next push to the north will probably throw some light upon our future prospects, and I only regret it will not be in my power to communicate the intelligence. I intended to have sent his Excellency a rough sketch of my last route, but have not been able to get it ready in time, and I fear I have already detained the little cutter too long: during their detention, I requested the master to examine some salt water inlets on the east side of Spencer's Gulf, and he said he would, but I have not yet heard the result of his researches. Should he have found, a good landing-place for goods, it would be of much importance to the northern parts of the colony when they become stocked; and nearly all the country as far as the head of the Gulf is more or less adapted for grazing. Pray return my best thanks to his Excellency for the abundant supply of stores we have received by the *Waterwitch*—especially for the barometer, which has arrived quite safely. I shall take great care of it, and shall make observations, whenever practicable, three times a day—8, a.m., noon, and 5, p.m. I only returned late last night, and have been so busy to-day preparing every thing for leaving the depôt, that I have been obliged to put off my writing until night; and I am now scribbling in the tent,

on my bed, with my young friend, Mr. Scott, fast asleep, and a cold bleak wind whistling through the place, so that I fear my writing will be scarcely legible. I send down the letters to the cutter in the morning, and intend to move on my party on the 24th. With kind remembrance to his Excellency, Mrs. Gawler, and family—

"Believe me, &c.

"EDWARD JOHN EYRE.

"G. Hall, Esq."

CHAPTER V.

BREAK UP THE ENCAMPMENT — ARRIVE AT DEPOT POOL—GEOLOGICAL CHARACTER OF THE COUNTRY—BAROMETERS OUT OF ORDER—ADVANCE TO RECONNOITRE—ASCEND TERMINATION HILL—SURPRISE NATIVE WOMEN—THEY ABANDON THEIR CHILDREN—INEFFECTUAL SEARCH FOR WATER — RETURN TOWARDS MOUNT DECEPTION — BROKEN CHARACTER OF THE COUNTRY—FIND WATER—THE SCOTT — REJOIN THE PARTY — WATER ALL USED AT DEPOT—EMBARRASSING CIRCUMSTANCES—REMOVE TO THE SCOTT — RECONNOITRE IN ADVANCE — BARREN COUNTRY — TABLE TOPPED ELEVATIONS — INDICATIONS OF THE VIOLENT ACTION OF WATER—MEET NATIVES—REACH LAKE TORRENS—THE WATER SALT—OBLIGED TO RETURN—ARRIVAL AT DEPOT—HOSTILE DEMONSTRATIONS OF THE NATIVES.

July 25.—To-day we broke up the camp, and commenced our labours in earnest, the men and the horses having had a rest of three weeks; the latter were in splendid condition and spirits, having eaten twenty-five bushels of oats, which had been sent up in the Waterwitch. Every thing had been well and conveniently arranged, and the whole moved on with an order and regularity that was very gratifying.

I was very ill at starting, and remained so for some days after, but as I had already been twice over the ground, and as my native boy was able to act as guide to the party, my indisposition was not

of so much consequence as it would have been under other circumstances. At times I was quite incapable of any exertion, and could not attend to any thing, being hardly able to sit upon my horse for half an hour together. From the 25th to the evening of the 30th, we were engaged in travelling from Mount Arden to Depôt Pool, by the same line of route by which myself and the native boy had returned from our exploration. In our progress we noticed many traces of natives around us, and saw many native fires among the hills; the people themselves did not, however, appear.

By a little trouble in examining the watercourses before encamping, we were generally able to procure water for our horses, at some distance among the hills; and we were usually fortunate enough to obtain tolerable food for them also. The grass, it is true, was generally scanty, or dry; but we found a succulent plant of the geranium tribe, bearing a small blue flower, and growing where the channels of the watercourses spread out in the plains, in the greatest abundance, and in the wildest luxuriance; of this the horses were extremely fond, and it appeared to keep them in good condition and spirits.

July 30. — The geological formation of the country we had passed through, consisted in the higher ranges of an argillaceous rock, of quartz, or of ironstone. Upon some of the hills the small loose stones had a vitrified appearance—in others they looked like the scoria of a furnace, and appeared to

be of volcanic origin, but nowhere did I observe the appearance of any thing like a crater. In the lower or front hills the rock was argillaceous, of a hard slaty nature, and inclined at an angle of about 45° from the horizontal. This formation was frequently traversed by dykes of grey limestone of a very hard texture.

Upon watering the horses at the hole in the rock, I was much disappointed to find that they had already sunk it eighteen inches, and now began to fear that it would not last them so long as I had anticipated, and that I should still be obliged to cross over the hills to the very rocky channel where I had found permanent water on the 15th of July. This I was desirous, if possible, to avoid, both from the difficult nature of the road by which that water must be reached, and from the circumstance that it was going so much out of our way into an all but impracticable country, and that consequently, when we did move on again to the north, we should be obliged to come all the way back again over the same bad road to gain the open country under Flinders range, where alone we could hope to make any progress with the drays.

July 31.—Having remained all day in camp to rest the party, I found that the horses had again made a great diminution in the depth of the water in the rock, I therefore had the drays all prepared in the evening, intending to move away to the other watercourse in the morning; but the next day the horses

had unfortunately strayed, and it was late before they were brought up, so that we could not get away. Upon watering them when they arrived, I found that less impression was made upon the water than on the previous days; and after an anxious consultation with my overseer, I decided upon leaving the party in camp at Depôt Pool until I could reconnoitre further north and return.

August 1.—To prevent any difficulties during my absence, in the event of the water failing in the rocky hole, I sent the native boy to shew the overseer the place where the permanent water was, and gave him instructions to move the party thither if he should find it necessary; but not until their safety absolutely required it, or before he had fully ascertained that no water was to be procured by digging in the bed of any of the adjoining watercourses. During his absence, I employed myself busily in getting ready for another push to the north with the native boy to search for a new depôt, as in a country so difficult and embarrassing, it was quite impracticable to move on the party until after having previously ascertained where they could be taken to with safety. Upon examining the barometers to-day, I was much concerned to find that they were both out of order and useless; the damp had softened the glue fastening the bags of leather which hold the quicksilver, and the leathers that were glued over the joints of the cisterns, and so much of the mercury had escaped, before I was aware of it, that I found all the previous

observations valueless. I emptied the tubes and attempted to refill them, but in so doing I unfortunately broke one of them, and the other I could not get repaired in a satisfactory manner, not being able, after all my efforts, to get rid of some small air bubbles that would intrude, in spite of every care I could exercise.

August 2.—Leaving early, I took with me a native boy, and a man on horseback, leading a pack-horse, to carry water, as I could not but be apprehensive, lest we might find none in the country into which we were advancing. In following down the Depôt watercourse to the plains, we found a fire where the natives had encamped the previous night. This surprised us, because we were not aware that there were any so immediately in our vicinity. It however shewed us the necessity of vigilance and circumspection in our future movements.

Steering for the most western point of Mount Deception range, until we opened one still more distant to the north-west, and which I named Termination Hill, we kept pushing on through barren stony plains, without grass or shrubs, and arrived late in the afternoon upon a large watercourse with gum-trees, but could find no water in its bed. Near it, however, in the plains, we were fortunate enough to discover a puddle of rain water, and at once halted for the night, though the feed was indifferent. We had travelled twenty-eight miles, and the pack-horse carrying twelve gallons of water, was considerably

fatigued. At the puddle, two teal were seen, which indicated the existence of a larger body of water somewhere in the neighbourhood, but our efforts to find it were unsuccessful.

August 3.—Crossing very heavy sandy ridges, we passed at intervals one or two dry watercourses, and the beds of some small dry lakes among the sandy ridges, in one of which was a little rain water which appeared to be rapidly drying up. Watering the horses we moved on for Termination Hill, but the nature of the country had been so unfavourable, that the pack-horse was knocked up, and I was obliged to halt four miles short of our intended destination, and where there was but poor feed for the animals. After dinner I walked to Termination Hill and ascended it. Like all the others I had recently examined, it was composed principally of quartz, ironstone and a kind of slaty rock; the low hills in front exhibiting the grey limestone, whilst patches of gum scrub were observable in many places. From the summit of Termination Hill, Lake Torrens bore W. 20° S. but the view was obstructed by intervening sand ridges, the elevated land on the opposite shore of the lake still appeared to continue, and was visibly further north than the lake itself, which, as I observed, was partially shut out by the ridges. To the north were low broken hills similar to those around me, but less elevated, and immediately under these hills to the westward, were heavy red sandy ridges, such as we had crossed during the day. To the eastward and

ten degrees north of east were seen Flinders range, with which Mount Deception and Termination Hills were connected, by low long spurs thrown off to the northward. In the north-east the horizon was one unbroken, low, flat, level waste, with here and there small table-topped elevations, appearing white in the distance and seemingly exhibiting precipitous faces. Wherever I turned, or whatever way I looked, the prospect was cheerless and disheartening. Our stage had been twenty-two miles.

August 4.—After giving five gallons of water each to my own and the native boy's horse, I sent back the man with the pack-horse and the empty kegs to the depôt. We then steered E. 5° S. across some very extensive barren stony plains, occasionally broken into irregular surfaces with steep white banks (of a fine freestone), forming the termination of the higher levels, fronting the hollows. These hollows or flats were covered with salsolaceous plants and samphire, and appeared once to have been salt swamps.

At twenty miles we came to a small watercourse emanating from the eastern hills, which we had now reached, and soon after to a larger one which we traced up for five miles among the front hills, which were composed of limestone, but were then obliged to encamp without water. Whilst rambling about after turning out the horses, I met with a party of native women and children, but could gain no information from them. They would not permit me to

come near them, and at last fairly ran away, leaving at their fire two young children who could not escape. I then went to their camp and examined the bags and property which had been left, and amongst other things found two kangaroo skins full of water, each containing from six to eight quarts; it was quite muddy, and had evidently been taken from a puddle in the plains, and carried to the present encampment in the bed of the watercourse. Having helped ourselves to some of the water, I tied a red pocket handkerchief round one of the children, as payment for it and returned to our own camp.

August 5.—During the night I was taken very ill again, and felt quite weak when I arose this morning, but circumstances admitted of no delay, and I was obliged to go on with my exploration: I continued to trace up the creek, which I found to be large and lined with gum-trees for many miles among rocky and precipitous hills, but altogether without water, and as I knew of none of this requisite, of a permanent character, behind me, I determined to retrace my steps again to Mount Deception range. In doing so, I had to pass near the place from whence the natives had taken flight, and from curiosity called to see if the children had been taken away; to my surprise and regret I found them still remaining, they had been left by their unnatural or terrified parents without food, and exposed to the inclemency of a cold winter's night; the fire had gone out, and the eldest of the children

had scraped a hole among the ashes in which both were lying. They were alarmed when they saw me, and would take nothing I offered them. The child around whom I had tied the handkerchief, had managed to get it off and throw it to one side. I now scarcely knew what to do, as I was fearful if I left them there, and the parents did not return, the poor little children might perish, and yet I was so far away from my own party, and in such difficult circumstances, that I knew not how I could take them with me. Upon due reflection, and considering that I had not seen a single male native, it struck me that the women might have gone for the men and would probably return by the evening to see where their little ones were.

Under this impression, I put the handkerchief again round the eldest child, and tying it firmly, I left them; I had hopes too, that some of the natives were watching our movements from the hills, and in this case they would at once return, when they saw us fairly depart from the neighbourhood.

Keeping a little to the south of west, I still found the country very much broken into hollows, with high steep banks bounding them, this singular formation being apparently the result of the violent action of water; but how long ago and under what circumstances I had no means of judging. Having found a puddle of water in the plains, I halted for the night, our stage having been about twenty miles.

August 6.—We again passed many of those singu-

lar hollows fronted by the high steep banks of the upper levels, and then crossed some low ironstone ridges to a channel emanating from Mount Deception range. This I traced through the hills to the westward without finding any water, and then following down the Mount Deception range in its western slopes, I examined all the watercourses coming from it; in one, which I named The Scott, after my young friend and fellow traveller, I found a large hole of rain water among the rocks, and at this I halted to rest and feed the horses. The latitude of the water in The Scott was 30° 32′ S. Pushing on again, late in the afternoon, I reached our camp of the 2nd August, quite tired, and the horses much fatigued, the puddle of water we had found here on our outward course was now nearly all dried up.

August 7.—Making an early start I returned to the Depôt Pool, and found the party all well. They were, however, just preparing to move away, as the water was nearly all gone. The drays were packed and everything ready when I arrived; they had tried to obtain water by digging, but had failed, having been stopped by hard rock.

I was now in a very awkward dilemma. The water where we were, had been all used, and we must consequently remove at once,—but where to, was the question? If I went to the permanent water to the eastward, I gained nothing, as I only harassed my party by travelling through an almost impracticable country, over which we must return before we could move further to the north,—and if I went

to the N. W. to The Scott, I went to a mere puddle of water, precarious and uncertain at the best, and at which, under any circumstances, we could not remain long:—yet move I must, as soon as the morning dawned. Many and anxious were the hours I spent in consideration and reflection.

Little indeed are the public aware of the difficulties and responsibilities attached to the command of an expedition of exploration;—the incessant toil, the sleepless hours, the anxious thoughts that necessarily fall to the share of the leader of a party under circumstances of difficulty or danger, are but imperfectly understood and less appreciated by the world at large. Accustomed to judge of undertakings only by their results, they are frequently as unjust in their censure as they are excessive in their approval. The traveller who discovers a rich and well watered district, encounters but few of the hardships, and still fewer of the anxieties, that fall to the lot of the explorer in desert regions, yet is the former lauded with praise, whilst the latter is condemned to obloquy; although the success perhaps of the one, or the failure of the other, may have arisen from circumstances over which individually neither had any control.

August 8.—The horses having rambled a little this morning it was rather late before we got away, I had, however, made up my mind to advance at all risks, and we accordingly travelled sixteen miles to the N. W.; halting without any water upon the large watercourse emanating from Mount Deception;

there was no grass either, and we were consequently obliged to tie up our horses for the night.

August 9.—The sheep had broken out of their yard, and could not be found this morning; so sending the party on with the native boy as a guide, I remained behind myself with the overseer, to search for them; they were soon found, and we moved on after the drays. In going up the watercourse I again found a native fire, where natives had been encamped within a mile of us during the night, without our being aware of it; so difficult is it always to know the proximity of these children of the wilds.

Having overtaken the party, I conducted them to The Scott, at which we arrived early in the day, though the distance could not be less than 20 miles. At night a party of natives were seen near, but did not come up to us.

August 10.—To day I prepared for another exploration to the N. W. and had all our casks and kegs new coopered and filled with water, to make them water tight. I found it necessary also to have our horses new shod, which was the third set of shoes they had required in less than two months, in consequence of the hard and stony roads over which we had travelled. The natives were again encamped near us at night, but did not come up.

August 11.—Leaving directions for the overseer to dig for water during my absence, I took a native boy and one man driving a cart loaded with water; we had mustered all the casks and kegs in the

party, holding altogether 65 gallons, and to draw this I had our three best draught horses yoked to the light cart, being determined to push as far as possible to the N. W. before I returned. At first we passed over a good road but stony, then over heavy red sand ridges, and at night encamped in a gorge coming from Termination Hill, where we had excellent feed for the horses, but no water. The traces of natives were numerous and recent, and I imagine they must obtain their supply of water at puddles in the plains, but we could find none at present. The weather was very hot and the flies excessively annoying, even at this early period of the year. We gave each of the horses three gallons of water out of the kegs, after which they fed well; the hills, as we advanced were getting lower, and the sandy ridges now wound close under them, and in some instances even among them; still there were many birds around us, amongst which cockatoo parrots were very numerous. Our stage was about 23 miles.

August 12.—Steering to the N. W. to a low range (the highest summit of which I named Mount North-west,) we just kept far enough in the plains to intercept the watercourses from the hills where they spread into the level country, and by this means we got excellent feed for our horses.; generally the same rich succulent herbage I have mentioned before, occasionally mixed with wild oats. It was only in places of this description that we could expect to find anything for our horses. In

the plains or on the hills there was not a blade of of anything green; at night we encamped upon a small dry channel with tolerable feed, but no water, and we again gave each horse three gallons from our kegs.

The country we were traversing as yet underwent no alteration, the only difference being, that the hills were getting lower and the watercourses less numerous, and both apparently without water; the sand ridges came more in among the hills, and the dry beds of small salt lakes were often met with; the salsolæ were more abundant, but the traces of natives were now less frequent; whilst those we fell in with seemed for the most part to have been left during the wet season. The rock formation still continued the same, quartz, ironstone, slate, and grey limestone, with saline crusts peeping above the ground in many places in the lower levels; the sky was cloudy and threatened rain, but none fell: our stage was 18 miles.

August 13.—Continuing our course to the N. W. I took on the cart for 13 miles to a large dry channel, coming from the hills, upon which we halted for an hour or two to rest and feed the horses, as there were some sprinklings of grass around. We had now a change in the appearance of the country; the ironstone ranges seemed to decrease rapidly in elevation to the north, and the region around appeared more level, with many very singular looking table-topped elevations from 50 to 300 feet in height and

with steep precipitous sides which were red, with the ironstone above, and white, with a substance like chalk, below. The country was covered with salsolæ, and we passed the beds of many dried up salt lakes. Ascending the highest ridge near us, I found Lake Torrens was no longer visible, being shut out by the sandy ridges to the westward, whilst the low ironstone hills impeded our view to the north, and to the east. Having given our horses water, we buried twelve gallons against our return, and sending back the man with the cart, and extra horses, the native boy and I still pushed on to the N. W., taking a pack-horse to carry our provisions and a few quarts of water for ourselves.

As we proceeded, the country changed to extensive plains and undulations of stones and gravel, washed perfectly level by water, and with the stones as even in size and as regularly laid as if they had been picked out and laid by a paviour. At intervals were interspersed many of the fragments of table land I have alluded to before, only perhaps a little less elevated than they had previously been; we passed also the beds of several small dry watercourses, and encamped upon one of the largest, long after dark, having travelled twenty-five miles since we left the cart, and having made in the whole a day's journey of thirty-seven miles. There was tolerable food in the bed of the watercourse, but the horses were thirsty and eat but little. Unfortunately, in crossing the stony ground, one of them cast a shoe, and began to go a little lame.

August 14.—Moving away very early we travelled sixteen miles due north, through a very similar country, only that the stones and gravel in the plains had become much finer and a good deal mixed with sand; the fragments of table land still continued in every direction at intervals, and their elevations still varied from 50 to 300 feet. In the upper part these elevations appeared red from the red sandy soil, gravel, or iron-stone grit which were generally found upon their summits. They had all steep precipitous sides, which looked very white in the distance, and were composed of a chalky substance, traversed by veins of very beautiful gypsum. There were neither trees nor shrubs, nor grass, nor vegetation of any kind except salsolaceous plants, and these every where abounded.

In the midst of these barren miserable plains I met with four natives, as impoverished and wretched looking as the country they inhabited. As soon as they saw us they took to their heels, apparently in great alarm, but as I was anxious to find out from them if there was any water near, I galloped after two of them, and upon coming up with them was very nearly speared for my indiscretion; for the eldest of the two men, who had in his hand a long, rude kind of spear with which he had been digging roots or grubs out of the ground (although I could not see the least sign of anything edible) finding that he was rather close pressed, suddenly halted and faced me, raising his spear to throw.

The rapid pace at which I had been pursuing prevented my reining in my horse, but by suddenly spurring him when within but a few yards of the native, I wheeled on one side before the weapon had time to leave his grasp, and then pulling up I tried to bring my friend to a parley at a less dangerous distance.

Finding that I did not attempt to injure him, the native stood his ground, though tremblingly, and kept incessantly vociferating, and waving me away; to all my signs and inquiries, he was provokingly insensible, and would not hear of anything but my immediate departure. Sometimes he pointed to the north, motioning me to go in that direction, but the poor wretch was in such a state of alarm and trepidation that I could make nothing of him and left him. He remained very quietly until I had gone nearly a quarter of a mile, and then thinking that he had a fair start, he again took to his heels, and ran away as fast as he could in the direction opposite to that I had taken.

Continuing our course northerly I steered for what appeared to be a small lake not far away to the N. W. and crossed over some heavy ridges of white sand; upon reaching the object of my search it proved to be a winding arm of the main lake (Torrens) at first somewhat narrow, but gradually enlarging as we traced it downwards. The bed of this arm was coated over, as had been the dry part of the bed of the main lake, with a very pun-

gent salt, with mud and sand and water intermixed beneath the upper crust.

Following the arm downwards I came to a long reach of water in its channel, about two feet deep, perfectly clear, and as salt as the sea, and I even fancied that it had that peculiar green tinge which sea-water when shallow usually exhibits.

This water, however, was not continuous; a little further on, the channel again became dry, as it increased in width in its approach to the main lake, the bed of which, near its shores, was also dry. From a high bank which I ascended, I had a full view of the lake stretching away to the north-east, as far as the eye could reach, apparently about thirty miles broad, and still seeming to be bounded on its western shores by a low ridge, or table land, beyond which nothing could be seen. No hills were visible any where, nor was there the least vegetation of any kind.

I was now upwards of 100 miles away from my party in a desert, without grass or water, nor could I expect to obtain either until my return to the creek, where I had left the twelve gallons, and this was about fifty miles away. The main basin of Lake Torrens was still four or five miles distant, and I could not expect to gain any thing by going down to its shores; as on previous occasions, I had ascertained that to attempt to cross it, or even to reach the water a few miles from its outer edge, was quite impossible, from the boggy nature of its bed.

From my present elevation, the lake was seen bending round to the N. E., and I became aware that it would be a barrier to all efforts to the north. My horses were suffering, too, from want of water and food; and I had, therefore, no alternative but to turn back from so inhospitable and impracticable a country.

With a heavy heart, and many misgivings as to the future, I retreated from the dismal scene, and measured back my steps as rapidly as possible towards the creek where our stock of water was buried. From the state in which our horses were, I knew, that to save their lives, it was necessary to get them to water without loss of time, and I therefore continued our homeward course during the whole night, and arrived early in the morning at the place where I had parted from the cart.

August 15.—It was now necessary to use great caution in the management of our jaded animals. During the last two days we had ridden them fully 100 miles over a heavy country, without food or water; and for the last twenty-four hours they had never had a moment's rest; and now we had only twelve gallons of water for three horses and ourselves, and were still fifty miles away from the depôt, without the possibility of getting a further supply until our arrival there.

Having hobbled the horses out for an hour, we watched them until they had rested a little, and got cool. I then gave them half of our supply of

water; and leaving them to feed under the superintendence of the native boy, took my gun, and walked seven or eight miles up the creek, under a scorching sun, to look for water, examining every gorge and nook, with an eagerness and anxiety, which those only can know who have been similarly circumstanced; but my search was in vain, and I returned to the encampment tired and disappointed. Out of what was left of our water, the boy and myself now made each a little tea, and then gave the remainder to the horses; after which we laid down for an hour whilst they were feeding. About four in the afternoon, we again saddled them, and moved homewards, riding, as before, the whole night, with the exception of about an hour, when we halted to feed the horses, upon meeting with a rich bed of the succulent geranium, of which they were so fond.

August 16.—Travelling on steadily, we began early in the afternoon to draw near to the depôt; and when within a mile and half of it, I was surprised, upon looking back, to see two natives trying to steal upon us with spears, who, as soon as they perceived they were observed, rose up, and made violent gestures of defiance, but at once desisted from following us. A little further on, upon a rise not far from the depôt, I was still more astonished to see at least thirty of these savages; and I hurried forwards as quickly as possible to ascertain what it could mean, not without some anxiety for the safety of my party.

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CHAPTER VI.

CAUSE OF HOSTILITY OF THE NATIVES—WELL SUNK UNSUCCESSFULLY — OVERSEER SENT TO THE EAST — THE SCOTT EXAMINED — ROCK WALLABIE — OVERSEER'S RETURN — ANOTHER VISIT TO LAKE TORRENS — BOGGY CHARACTER OF ITS BED—EXTRAORDINARY EFFECTS OF MIRAGE AND REFRACTION—RETURN TO THE CAMP—SUPPLY OF WATER EXHAUSTED — LEAVE THE DEPOT — THE MUNDY—THE BURR—MOUNT SERLE—LAKE TORRENS TO THE EAST—MELANCHOLY PROSPECTS.

August 16.—Upon reaching the camp the extraordinary behaviour of the natives was soon explained to me. At the time when I left the depôt on the 11th of August, in giving the overseer general directions for his guidance, I had among other matters requested him, if he found any natives in the neighbourhood, to try and get one up to the camp and induce him to remain until my return, that we might, if possible, gain some information as to the nature of the country or the direction of the waters. In endeavouring to carry out my wishes, it seems he had one day come across two or three natives in the plain, to whom he gave chase when they ran away. The men escaped, but he came up with one of the females and took her a prisoner to the camp, where he kept her for a couple of days, but could gain no information from her;

she either could not be understood, or would not tell where there was water, although when signs were made to her on the subject, she pointed to the east and to the north-west. After keeping her for two days, during which, with the exception of being a prisoner, she had been kindly treated, she was let go with the present of a shirt and handkerchief.

It was to revenge this aggression that the natives had now assembled; for which I could not blame them, nor could I help regretting that the precipitancy of my overseer should have placed me in a position which might possibly bring me into collision with the natives, and occasion a sacrifice of life; an occurrence I should deplore most deeply under any circumstances, but which would be doubly lamentable when I knew that my own party had committed the first act of aggression.

The number of natives said to have been seen altogether, including women and children, was between fifty and sixty, and though they had yet actually committed no overt act against us, with the exception of trying to steal upon myself and the native boy as we returned; yet they had established themselves in the close vicinity of our encampment, and repeatedly exhibited signs of defiance, such as throwing dust into the air, shouting, and threatening with their weapons, and once or twice, the evening before my arrival, crossing within a very short distance of the tents, as if for the purpose of reconnoitring our position and strength; I determined,

however, nothing but the last extremity should ever induce me to act on the defensive.*

When on my return to the depôt, I had seen the natives creeping after me with their spears, I and the native boy at once halted, turned round and went slowly towards them, upon this they retreated. They would see by this that we did not fear them, and as the party at the camp had been increased in number by our return, I thought they might probably be more cautious in their hostile demonstrations, which for the present was the case, for we saw nothing more of them for some time.

During my absence, the overseer, according to my instructions, had put a party of men to dig for water in the bed of the creek, about four miles from the depôt, in a westerly direction and down upon the plains. They were busy when I arrived at the depôt; the soil already dug through had been a very hard gravel, but as yet no water had been found, they had got to a depth of about ten feet; but from the indurated character of the soil were proceeding very slowly.

I was, however, too much fatigued to go and inspect the work immediately, the boy and myself as well as the horses being completely worn out. We had ridden in the last five days and a half, about two hundred miles, and walked about twenty

* "And they cried out, and cast off their clothes, and threw dust into the air."—Acts xxii. 23.

up and down rocky and precipitous creeks, whilst, for the last two nights before our arrival we had scarcely been off the horses' back.

On the 17th, which was dreadfully hot, I went in the afternoon to see what progress was being made at the well, and found that only two feet had been dug in the last twenty-four hours, whilst just as I arrived the men came to a solid mass of rock, and could sink no further; I at once ordered them to return to the camp, as I did not think it worth while to make further attempts in so unkindly a soil, and indeed I was unwilling to have my little party too much divided in the neighbourhood of so many natives. The men themselves were very glad to get back to the camp, having been apprehensive of an attack for the last two or three days.

August 18.—This morning I sent off the overseer and a native boy to the eastward, to look for water in the watercourses I had been at on the 5th of August, the Scott not having then been discovered; they would now be thirty-six miles nearer water than any I was acquainted with at that time, and would consequently be less hurried and embarrassed in their movements than I was. By giving them a pack-horse to carry ten gallons of water, I hoped they would be able to examine all the watercourses so effectually as to secure the object of their search, for I felt satisfied that water was to be found somewhere among the high ranges we had seen in the direction they were going; I also directed the

overseer to visit the camp where the two native children had been left, and to see what had been their fate.

During the day I employed myself in writing; the weather was excessively close and oppressive, with heavy clouds coming up from the S. W. against the wind at N. E. At night it blew almost a hurricane, accompanied by a few drops of rain, after which, the wind then veered round to the north.

The 19th was another oppressive hot day, with a northerly wind, and clouds of dust which darkened the air so that we could not see the hills distinctly, although we were close under them. The flies were also incessant in their persecuting attacks. What with flies and dust, and heat and indisposition, I scarcely ever remember to have spent a more disagreeable day in my life. My eyes were swollen and very sore, and altogether I was scarcely able to attend to any thing or employ myself in any profitable way.

August 20.—Some slight showers during the night made the weather cool and pleasant, the day too was cloudy, and I was enabled to occupy myself in charting, working out observations, &c. whilst Mr. Scott, by shooting, supplied us with some wallabies. This animal is very like a rabbit when running, and quite as delicate and excellent in eating.

August 21.—Not having seen the natives for the last two days, I thought I might venture to explore the watercourse we were encamped upon, and set off

on horseback immediately after breakfast, accompanied by Mr. Scott.

We traced up its stony and rugged bed for about seven miles among the hills, to a point where the scenery was peculiarly grand and sublime. The cliffs rose perpendicularly from the channel of the watercourse to a height of from six to eight hundred feet, towering above us in awful and imposing prominencies. At their base was a large pool of clear though brackish water; and a little beyond a clump of rushes, indicating the existence of a spring. In the centre of these rushes the natives had dug a small well, but the water was no better than that in the larger pool.

The natives generally resort to such places as these when the rain water is dried up in the plains or among the hills immediately skirting them. Far among the fastnesses of the interior ranges, these children of the wilds find resources which always sustain them when their ordinary supplies are cut off; but they are not of corresponding advantage to the explorer, because they are difficult of access, not easily found, and seldom contain any food for his horses, so that he can barely call at them and pass on. Such was the wretched and impracticable character of the country in which we were now placed.

Having tied up our horses, Mr. Scott and I ascended to the top of the high cliff by winding along the ridges at the back of it. From its summit we had an extensive view, and I was enabled to take

several angles. One of the high peaks in the Mount Deception range bearing S. 35° W. about five miles off I named Mount Scott. To the east were seen high ranges, to which I had sent my overseer. Descending the hill we examined the course of the watercourse a few miles further, and ascertaining that there was no more water in it, retraced our steps towards the depôt, somewhat fatigued with clambering up rocky ranges under the oppressive heat of an almost tropical sun.

In the course of the morning Mr. Scott shot a rock wallabie of rather a large species, and many more were seen about the high perpendicular cliff under which we had found the water. These singular animals appeared to have a wonderful facility for scaling precipices, for they leapt and clambered up among the steep sides of the cliffs in a manner quite incredible, and where it was perfectly impossible for any human being to follow them.

In the evening the overseer and native boy returned, they had traced up the watercourse I turned back from on the 5th of August, and had found water in it about eight miles beyond where I gave up the search. They had also visited the native camp where the two little children had been left deserted, they were now gone, and the whole plain around had been strewed with green boughs. The handkerchief I had tied round the eldest child had been taken off and left at the camp, the natives probably dreading to have anything to do with property belonging to such

fearful enchanters as they doubtless suspected us to be.

Our party being once more all together, it became necessary to decide upon our future movements, the water in the hole at the depôt being nearly all used, and what was left being very muddy and unpalatable. Before I abandoned our present position, however, I was anxious to make a journey to the shores of Lake Torrens to the westward; I had already visited its basin at points fully 150 miles apart, viz. in about 29° 10′ S. latitude, and in 31° 30′ S. I had also traced its course from various heights in Flinders range, from which it was distinctly visible, and in my mind, had not the slightest doubt that it was one continuous and connected basin. Still, from the hills of our present depôt, it was not visible to the north of west, and I should not have felt myself justified in going away to the eastward, without positively ascertaining its connection with the basin I was at to the north-west; accordingly, as soon as the overseer returned I got ready for another harassing and uninteresting journey to the westward.

August 22.—Setting off early this morning, accompanied by a native boy, I steered W.N.W. For the first four miles, I took my overseer along with me, to shew him the direction I intended to take, so that if I did not return in two days, he might send a pack-horse with water to meet me along the tracks.

After he had left I pushed steadily on for thirty-

five miles, principally over heavy sandy ridges, which were very fatiguing to the horses, and at dark reached the outer dunes of the lake, where I was obliged to tie the horses up to some small bushes, as there was neither water nor grass for them. The bed of the lake where I struck it, seemed dry for some distance from the shore, but towards the middle there appeared to be a large body of water. From our camp Mount Deception bore E. 26° S. and Termination Hill, E. 35° N.

August 23.—Starting early, I traced the course of the lake north-westerly for ten miles, and was then able to satisfy myself that it was a part of the same vast basin I had seen so much further to the north, it inclined here considerably to the westward, and this circumstance added to the high sandy ridges intervening between it and Flinders range fully explained the cause of our not having observed its course to the north of west from the hills near our depôt. Crossing the sandy ridge bounding the basin of the lake, I was surprised to see its bed apparently much contracted, and the opposite shore distinctly visible, high, rocky and bluff to the edge of the water, seemingly only seven or eight miles distant, and with several small islands or rocks scattered over its surface. This was however only deceptive, and caused by the very refractive state of the atmosphere at the time, for upon dismounting and leading the horses into the bed of the lake, the opposite shore appeared to recede, and the rocks

or islands turned out to be only very small lumps of dirt or clay lying in the bed of the lake, and increased in magnitude by refraction.

I penetrated into the basin of the lake for about six miles, and found it so far without surface water. On entering at first, the horses sunk a little in a stiff mud, after breaking through a white crust of salt, which everywhere coated the surface and was about one eighth of an inch in thickness, as we advanced the mud became much softer and greatly mixed with salt water below the surface, until at last we found it impossible to advance a step further, as the horses had already sunk up to their bellies in the bog, and I was afraid we should never be able to extricate them, and get them safely back to the shore. Could we have gone on for some distance, I have no doubt that we should have found the bed of the lake occupied by water, as there was every appearance of a large body of it at a few miles to the west. As we advanced a great alteration had taken place, in the aspect of the western shores. The bluff rocky banks were no longer visible, but a low level country appeared to the view at seemingly about fifteen or twenty miles distance. From the extraordinary and deceptive appearances, caused by mirage and refraction, however, it was impossible to tell what to make of sensible objects, or what to believe on the evidence of vision, for upon turning back to retrace our steps to the eastward, a vast sheet of water appeared to intervene between us and the shore, whilst

the Mount Deception ranges, which I knew to be at least thirty-five miles distant, seemed to rise out of the bed of the lake itself, the mock waters of which were laving their base, and reflecting the inverted outline of their rugged summits. The whole scene partook more of enchantment than reality, and as the eye wandered over the smooth and unbroken crust of pure white salt which glazed the basin of the lake, and which was lit up by the dazzling rays of a noonday sun, the effect was glittering, and brilliant beyond conception.*

Upon regaining the eastern shore, I found that all I had been able to effect was to determine that the lake still continued its course to the N.W. that it was still guided as before, by a ridge like a sea shore, that its area was undiminished, that its bed was dry on the surface for at least six miles from the outer margin, and that from the increasing softness of the mud, occasioned by its admixture with water, as I pro-

* Very similar appearances seem to have been observed by Monsieur Peron, on the S. W. coast near Geographe Bay.

"A cette époque nous éprouvions les effets les plus singuliers du *mirage;* tantôt les terres les plus uniformes et les plus basses nous paroissoient portées au dessus des eaux, et profondément déchirrées dans toutes leurs parties; tantôt leurs crêtes supérieures sembloient renversées, et reposer ainsi sur les vagues; à chaque instant on croyoit voir au large de longues chaînes de récifs, et de brisans qui sembloient se reculer à mesure qu'on s'en approchoit davantage." —*Voyage de découvertes aux Terres Australes rédigé par Péron.*

ceeded there was every probability that still further west, water would be found upon the surface. Beyond these few facts, all was uncertainty and conjecture in this region of magic. Turning away from the lake, I retraced my steps towards the depôt, and halted at dark after a stage of nearly forty miles. Here was neither grass nor water, and again I was obliged to tie up the unfortunate horses, jaded, hungry and thirsty.

During the night, I released one of the poor animals for an hour or two, thinking he would not stray from his companion, and might, perhaps, crop a few of the little shrubs growing on the sand ridges, but on searching for him in the morning he was gone, and I had to walk twelve miles over the heavy sand tracking him, the boy following along our outward track with the other horse, for fear of missing the man who was to meet us with water.

The stray horse had fortunately kept near the line we had followed in going to the lake, and I came upon him in a very weak and miserable condition, soon after the arrival of the man who had been sent to meet us with water. By care and slow travelling, we reached the depôt safely in the afternoon, having crossed in going and returning, upwards of 100 miles of desert country, during the last three days, in which the horses had got nothing either to eat or drink. It is painful in the extreme, to be obliged to subject them to such hardships, but alas, in such a country, what else can be done.

In the evening, I directed the overseer to have

every thing got ready for breaking up our encampment on the morrow, as the party had been fifteen days in depôt, and little else than mud remained in the hole which had supplied them with water.

August 25.—Slight showers during the night, and the day dark and cloudy, with rather an oppressive atmosphere. The horses had strayed during the night, so that it was nine o'clock before we got away.

We had scarcely left the place of encampment, when shoutings were heard, and signal fires lit up in every direction by the natives, to give warning I imagine of our being abroad, and to call stragglers to their camp. These people had still remained in our immediate vicinity, and were now assembled in very considerable numbers on the brow of one of the front ridges, to watch us pass by. They would not approach us, but as the drays moved on kept running in a line with them, at some distance, and occasionally shouting and gesticulating in an unintelligible manner.

In our first and only intercourse with these natives, we had unfortunately given them just cause of offence, and I was most anxious, if possible, before leaving, to efface the unfavourable impression which they had received. Letting the drays therefore move on, I remained behind with Mr. Scott, leading our horses, and trying to induce some of the natives to come up to us; for a long time, however, our efforts were in vain, but at last I succeeded in per-

suading a fine athletic looking man to approach within a moderate distance; I then shewed him a tomahawk, which I laid on the ground, making signs that I intended it for him. When I had retired a little, he went and took it up, evidently comprehending its use, and appearing much pleased with the gift; the others soon congregated around him, and Mr. Scott and I mounting our horses, followed the party, leaving the sable council to discuss the merits of their new acquisition, and hoping that the unfavourable opinion with which we had at first impressed them, would be somewhat modified for the future.

Steering N. 43° W. for five miles, and then winding through the range, in the bed of a watercourse to the plains on the other side, we took a direction of E. 20° N. for fifteen miles, arriving about dark upon a small channel that I had crossed on the 14th of August. Here was good feed for the horses, and plenty of water a little way up among the hills. This watercourse I had not examined when I was here before, preferring to trace up the larger one beyond instead. Had I followed this, I should easily have found water, and been relieved from much of the anxiety which I had then undergone.

In travelling through a country previously unexplored, no pains should be spared in examining every spot, even the most unlikely, where it is possible for water to exist, for after searching in vain, in large deep rocky and likely looking watercourses,

I have frequently found water in some small branch or gorge, that had appeared too insignificant, or too uninviting to require to be explored. This I named The Mundy, after my friend, Alfred Mundy, Esq., now the Colonial Secretary of South Australia.

Early this morning, I took Mr. Scott with me, to examine The Mundy, leaving the overseer to proceed with the party.

After entering the hills a short distance, we found in the bed of the Mundy a strongly running stream, connecting several reaches of waters, upon which many black ducks were sailing about. This appeared to be one of the finest and best streams we had yet discovered, although the water was slightly impregnated with alum. After the watercourse left the hills, the surface water all disappeared, the drainage being then absorbed by the light sandy soil of the plains, and this had invariably been the case with all the waters emanating from Flinders range.

Crossing some stony ridges, we followed the party up the large watercourse, which I had traced so far on the 5th of August, since named the Burr, after the Deputy Surveyor-general of the colony, and at nineteen miles halted early in the afternoon, at some springs rising among rocks and rushes in its bed. The water was very brackish, though drinkable, but did not extend far on either side of the spot we were encamped at, and when after

dinner, I took a long walk up the watercourse to search for more, I was unable to find any either in the main channel or its branches. The grass was abundant and good. The latitude of the camp I ascertained to be 30° 27′ S.

August 27.—Having risen and breakfasted very early, I took Mr. Scott and a native boy with me, and steered for a very high hill with rather a rounded summit, bearing from our camp E. 17° S. This I named Mount Serle, in accordance with a request made to me before my departure, by the Governor, that I would name some remarkable feature in the country after Mr. Serle. This was the most prominent object we had hitherto met with; among high ranges it appeared the highest, and from a height above our present encampment, it had been selected by us as the most likely point from which to obtain a view to the eastward.

The elevation of this hill could not be less than three thousand feet above the level of the sea; but unfortunately, the injury my barometer had sustained in the escape of some of the mercury, and my being unable to fill it again properly, quite precluded me from ascertaining the height with accuracy.

In our route to Mount Serle, we observed another hill, rather more to the northward, seemingly of as great an altitude as Mount Serle itself; this was not situate in the Mount Serle range, nor had it been seen by us in our view from the height above the depôt.

At ten miles from our camp, we came to a large watercourse, emanating from the Mount Serle range on the south side, and running close under its western aspect, with an abundance of excellent clear water in it. This I named the Frome, after the Surveyor-general of the colony, to whose kindness I was so much indebted in preparing my outfit and for the loan of instruments for the use of the expedition.

Having watered our horses we tied them up to some trees, and commenced the ascent of Mount Serle on foot. The day was exceedingly hot, and we found our task a much harder one than we had anticipated, being compelled to wind up and down several steep and rugged ridges before we could reach the main one.

At length, however, having overcome all difficulties we stood upon the summit of the mountain. Our view was then extensive and final. At one glance I saw the realization of my worst forebodings; and the termination of the expedition of which I had the command. Lake Torrens now faced us to the east, whilst on every side we were hemmed in by a barrier which we could never hope to pass. Our toils and labours and privations, had all been endured to no purpose; and the only alternative left us would be to return, disappointed and baffled.

To the north and north-west the horizon was unbroken to the naked eye, but with the aid of a

powerful telescope I could discover fragments of table land similar to those I had seen in the neighbourhood of the lake in that direction. At N. 8° W. a very small haycock-looking hill might be seen above the level waste, probably the last of the low spurs of Flinders range to the north. To the north-east, the view was obstructed by a high range immediately in front of us, but to the east and as far as E. 13° S. we saw through a break in the hills, a broad glittering belt in appearance, like the bed of a lake, but apparently dry.

The ranges seemed to continue to the eastward of Mount Serle for about fifteen miles, and then terminated abruptly in a low, level, scrubby-looking country, also about fifteen miles in extent, between the hills and the borders of the lake. The latter appearing about twenty-five miles across, whilst beyond it was a level region without a height or elevation of any kind.

Connecting the view before me with the fact that on the 14th August, when in about lat. 29° S., I had found Lake Torrens turning round to the north-east, and had observed no continuation of Flinders range to the eastward of my position, I could now no longer doubt that I had almost arrived at the termination of that range, and that the glittering belt I now saw to the east, was in fact only an arm of the lake taking the drainage from its eastern slopes.

Sad and painful were the thoughts that occupied my mind in returning to the camp. Hitherto, even

when placed in the most difficult or desperate circumstances I was cheered by hope, but now I had no longer even that frail solace to cling to, there was no mistaking the nature of the country, by which we were surrounded on every side, and no room for doubting its impracticability.

CHAPTER VII.

EXCURSION TO THE NORTH-EAST—TRACE DOWN THE FROME—WATER BECOMES SALT—PASS BEYOND THE RANGES—COCKATOOS SEEN—HEAVY RAINS—DRY WATER-COURSES—MOUNT DISTANCE—BRINE SPRINGS—MOUNT HOPELESS—TERMINATION OF FLINDERS RANGE—LAKE TORRENS TO THE NORTH AND TO THE EAST—ALL FURTHER ADVANCE HOPELESS—YOUNG EMUS CAUGHT—REJOIN PARTY—MOVE BACK TOWARDS MOUNT ARDEN—LOSS OF A HORSE—ARRIVE AT THE DEPOT—PLANS FOR THE FUTURE—TAKE UP STORES—PREPARE FOR LEAVING.

Upon returning to the depot at the Burr, I decided upon making an excursion to the north-east, to ascertain the actual termination of Flinders range, and the nature of the prospect beyond it; not to satisfy myself, for a single glance from the eminence I had recently occupied at Mount Serle, had for ever set my curiosity at rest on these points, but in discharge of the duty I owed to the Governor, and the promoters of the expedition, who could not be expected to be satisfied with a bare conjecture on a subject which they had sent me practically to demonstrate, however fairly from circumstances the conclusions might be deduced at which I had been

compelled to arrive. Accordingly, on the morning of the 29th, I took with me my overseer, one man, a native boy, and a cart drawn by three horses to carry water; and making an early start, proceeded to attempt for the last time to penetrate into those regions of gloom.

After travelling ten miles, we arrived at the Frome, where we watered and fed the horses. From this place I sent the overseer on before us, to see how far the water extended, that we might determine where to fix our halting-place for the night. After resting awhile we proceeded on with the cart, tracing down the watercourse over a very rough and stony road on which the cart was upset, but without any serious damage, and passing several very large and fine water-holes with many teal and wood-duck upon them.

At eight miles from where we lunched, we encamped with abundance of water, but very little grass. The latitude by meridian altitude of Altair was 30° 18′ 30″ S. In the evening the overseer returned, and stated there was water for nine miles further, but that the road was very rocky and bad.

August 30.—Leaving the overseer to bring on the cart, I rode on a-head down the watercourse to trace the continuance of the water. The road I found to be very bad, and at twenty-three miles, upon tasting the water I found it as salt as the sea, and the bed of the creek quite impracticable for a cart; I therefore hurried back for seven miles, and

halted the party at the last good water-hole, which was about sixteen miles from our yesterday's camp.

We had seen many ducks during the day, two of which I shot, and the black boy found a nest with fresh eggs in it, so that we fared more luxuriously than usual. The night set in very dark and windy, but no rain fell.

August 31.—This morning I sent the overseer back to the depôt with the cart and two horses, whilst I and the native boy proceeded on our route on horseback, taking also a man leading a pack-horse to carry water for us the first day. Following down the watercourse, we passed through some imposing scenery, consisting of cliffs from six to eight hundred feet in height, rising perpendicularly from their bases, below which were recesses, into which the sun never shone, and whose gloomy grandeur imparted a melancholy cast to the thoughts and feelings, in unison with the sublimity of the scene around.

After travelling twelve miles from the camp, we got clear of the hills, and found an open country before us to the north; through this we proceeded for ten miles further, still following the direction of the watercourse, and halting upon it for the night, after having made a stage of twenty-two miles. We had tolerable grass for the horses, but were obliged to give them water from the kegs.

At this place I was much astonished to see four white cockatoos, flying about among the gum-trees in

the watercourse, and immediately commenced a narrow search for water, as I knew those birds did not frequently go far away from it: there was not, however, a drop to be found anywhere, nor the least sign of there having been any for a long time. What made the circumstance of finding cockatoos here so surprising and unusual was, that for the last two hundred miles we had never seen one at all. Where then had these four birds come from? could it be that they had followed under Flinders range from the south, and had strayed so far away from all others of their kind, or had they come from some better country beyond the desert by which I was surrounded, or how was that country to be attained, supposing it to exist? Time only may reply to these queries, but the occasion which prompted them was, to say the least, extraordinary.

Towards night the sky became overcast with clouds, and as I saw that we should have rain, I set to work with the boy and made a house of boughs for our protection, but the man who accompanied us was too indolent to take the same precaution, thinking probably that the rain would pass away as it had often done before. In this, however, he was disappointed, for the rain came down in torrents*—in an

* This will not appear surprising, when the great amount of rain which falls annually in some parts of Australia, is taken into account. The Count Strzelecki gives 62.68 inches, as the average annual fall for upwards of twenty years, at Port Macquarie.—At p. 193, that gentleman remarks: —"The greatest fall of rain recorded in New South Wales, during 24 hours, amounted to 25 inches, (Port Jackson)."

hour or two the whole country was inundated, and he was taught a lesson of industry at the expense of a thorough and unmitigated drenching.

September 1.—This morning I sent the man back to the depôt with the pack-horse, with orders to the overseer to move back the party as rapidly as possible towards Mount Arden, that by taking advantage of the rain we might make a short route through the plains, and avoid the necessity of going up among the rugged and stony watercourses of the hills.

This retrograde movement was rendered absolutely necessary from our present position, for since we had wound through the hills to the north, and come out upon the open plains, I saw that Flinders range had terminated, and I now only wished to trace its northern termination so far east as to enable me to see round it to the southward, as well as to ascertain the character and appearance of the country to the north and to the east; as soon therefore as the man had left, I proceeded at a course of E. 35° N. for a low and very distant elevation, apparently the last of the hills to the eastward, this I named Mount Distance, for it deceived us greatly as to the distance we were from it.

In passing through the plains, which were yesterday so arid and dry, I found immense pools, nay almost large reaches of water lodged in the hollows, and in which boats might have floated. Such was the result of only an hour or two's rain, whilst the

ground itself, formerly so hard, was soft and boggy in the extreme, rendering progress much slower and more fatiguing to the horses than it otherwise would have been. By steadily persevering we made a stage of thirty-five miles, but were obliged to encamp at night some miles short of the little height I had been steering for.

During our ride we passed several dry watercourses at five, ten, twenty-five, thirty, and thirty-five miles from our last encampment. The last we halted upon with good feed for the horses, and rain-water lodged everywhere. All these watercourses took their course to the north, emptying and losing themselves in the plains. In the evening heavy showers again fell, and the night set in very dark.

September 2.—After travelling seven miles we ascended Mount Distance, and from it I could see that the hills now bore S. and S.E. and were getting much lower, so that we were rapidly rounding their northern extremity. To the north and north-east were seen only broken fragments of table lands, similar to what I found near the lake to the north-west; the lake itself, however, was nowhere visible, and I saw that I should have another day's hard riding before I could satisfactorily determine its direction. Upon descending I steered for a distant low haycock-like peak in the midst of one of the table-topped fragments; from this rise I expected the view would be decisive, and I named it Mount Hopeless.—From Mount Distance it bore E. 25° N.

Crossing many little stony ridges, and passing the channel of several watercourses, I discovered a new and still more disheartening feature in the country, the existence of brine springs. Hitherto we had found brackish and occasionally salt water in some of the watercourses, but by tracing them up among the hills, we had usually found the quality to improve as we advanced, but now the springs were out in the open plains, and the water poisoned at its very source.

Occasionally round the springs were a few coarse rushes, but the soil in other respects was quite bare, destitute of vegetation, and thickly coated over with salt, presenting the most miserable and melancholy aspect imaginable. We were now in nearly the same latitude as that in which Captain Sturt had discovered brine springs in the bed of the Darling, and which had rendered even that river so perfectly salt that his party could not make use of it.

September 2.—At thirty-five miles we reached the little elevation I had been steering for, and ascended Mount Hopeless, and cheerless and hopeless indeed was the prospect before us. As I had anticipated, the view was both extensive and decisive. We were now past all the ranges; and for three quarters of the compass, extending from south, round by east and north, to west, the horizon was one unbroken level, except where the fragments of table land, or the ridge of the lake, interrupted its uniformity.

The lake was now visible to the north and to the east; and I had at last ascertained, beyond all doubt, that its basin, commencing near the head of Spencer's Gulf, and following the course of Flinders range (bending round its northern extreme to the southward), constituted those hills the termination of the island of South Australia, for such I imagine it once to have been. This closed all my dreams as to the expedition, and put an end to an undertaking from which so much was anticipated. I had now a view before me that would have damped the ardour of the most enthusiastic, or dissipated the doubts of the most sceptical. To the showers that fell on the evening of the 31st of August, we were solely indebted for having been able to travel thus far; had there been much more rain the country would have been impracticable for horses,—if less we could not have procured water to have enabled us to make such a push as we had done.

The lake where it was visible, appeared, as it had ever done, to be from twenty-five to thirty miles across, and its distance from Mount Hopeless was nearly the same. The hills to the S. and S. W. of us, seemed to terminate on the eastern slopes, as abruptly as on the western; and from the point where we stood, we could distinctly trace by the gum-trees, the direction of watercourses emanating from among them, taking northerly, north-easterly, easterly and south-easterly courses, according to the point of the range they came from. This had been the case during the whole of our route under Flin-

der's range. We had at first found the watercourses going to the south of west, then west, north-west, north, and now north-east, east and south-east. I had, at the same time, observed all around this mountain mass, the appearance of the bed of a large lake, following the general course of the ranges on every side, and receiving, apparently, the whole drainage from them.

On its western, and north-western shores, I had ascertained by actual examination, that its basin was a very low level, clearly defined, and effectually inclosed by an elevated continuous sandy ridge, like the outer boundary of a sea-shore, its area being of immense extent, and its bed of so soft and yielding a nature, as to make it quite impossible to cross it. All these points I had decided positively, and finally, as far as regards that part of Lake Torrens, from near the head of Spencer's Gulf, to the most north-westerly part of it, which I visited on the 14th of August, embracing a course of fully 200 miles in its outline. I had done this, too, under circumstances of great difficulty, toil, and anxiety, and not without the constant risk of losing my horses, from the fatigues and privations of the forced labours I was obliged to impose upon them.

Having ascertained these particulars, and at so much hazard, relative to Lake Torrens, for so great a part of its course, what conclusion could I arrive at with regard to the character of its other half to the north-east, and east of Flinders ranges, as seen

from Mount Hopeless, and Mount Serle points, nearly ninety miles apart! The appearances from the ranges were similar; the trend of all the water-courses was to the same basin, and undoubtedly that basin, if traced far enough, must be of nearly the same level on the eastern, as on the western side of the ranges. I had completely ascertained that Flinders range had terminated to the eastward, the north-east, and the north; that there were no hills or elevations connected with it beyond, in any of these directions, and that the horizon every where was one low uninterrupted level.

With such data, and under such circumstances, what other opinion could I possibly arrive at, than that the bed of Lake Torrens was nearly similar in its character, and equally impracticable in its eastern, as its western arm; and that, considering the difficulties I had encountered, and the hazards I had subjected myself to, in ascertaining these points so minutely on the western side, I could not be justified in renewing those risks to the eastward, where the nature and extent of the impediments were so self-evidently the same, and where there was not the slightest hope of any useful result being attained by it.

I was now more than a hundred miles away from my party; and having sent them orders to move back towards Mount Arden, I had no time to lose in following them. With bitter feelings of disappointment I turned from the dreary and cheerless scene around

me, and pushing the horses on as well as circumstances would allow, succeeded in retracing ten miles of my course by a little after dark, having completed a stage of fully forty-five miles during the day. Here there was tolerable good grass, and plenty of water from the late rains, so that the horses were more fortunate on this excursion than usual. I observed the variation to be 4° E.

September 3.—Travelling early, we made a long stage of about forty miles, and encamped with good grass and water. During the day we caught four young emus in the plains, which we roasted for supper, being very hungry, and upon short allowance, as I had not calculated upon remaining out so long; the black boy enjoyed them exceedingly, and I managed to get through one myself. They were about the size of full grown fowls.

September 4.—Making a very early start, we travelled twenty miles to the watercourse, where we had encamped on the 31st of August, striking it a little lower down. As I had left one or two trifles here, that I wished to take on with me, I sent the black boy for them, telling him to follow my tracks while I went slowly on. Upon finding that he did not overtake me so soon as I expected, I halted for some time, but still he did not come up, and I again proceeded; for as I had left my former track, I concluded he had taken that line, and thus missed me. Steering, therefore, across the hills, some

of which were very stony and broken, I made for the Mundy, which I reached very late in the evening, and found the party safely encamped there.

I had rode fifty-five miles, and had been on horseback about thirteen hours, so that both myself and horse were well nigh knocked up. The black boy had not arrived, nor did he come up during the night.

The next day, becoming uneasy about his absence, I detained the party in the camp, and sent Mr. Scott to search for him, who fortunately met him almost immediately he had left us. The boy's detention had been occasioned by the fagged condition of his horse, which prevented the possibility of his overtaking me. As the day was wet, I did not move on, but gave the party a day's rest, whilst I employed myself in meditating upon the disappointment I had experienced, and the future steps it might be most advisable to take to carry out the objects of the expedition. I was still determined not to give up the undertaking,—but rather to attempt to penetrate either to the eastward or westward, and to try to find some other line of route that might afford a practicable opening to the interior.

September 6.—Moving on the party early to-day, I pushed steadily towards the depôt near Mount Arden. In doing this, the favourable state of the weather enabled us to keep more in the open plains,

and thus both to avoid a good deal of rough ground, and to shorten the road considerably.

Upon mustering the horses on the 9th, the overseer reported to me that one of them was lying down with a broken leg, and upon going to examine him, I found that it was one of the police horses kindly lent to the expedition by the Governor. During the night some other horse had kicked him and broken the thigh bone of the hind leg. The poor animal was in great pain and unable to rise at all, I was therefore obliged to order the overseer to shoot him. By this accident we lost a most useful horse at a time when we could but ill spare one.

During our progress to the south we had frequently showers and occasionally heavy rains, which lodging in puddles on the plains, supplied us abundantly with water, and we were unusually fortunate enough to obtain grass also. We were thus enabled to push on upon nearly a straight course, which, after seven days of hard travelling, brought us once more, on the afternoon of the 12th, to our old position at the depôt near Mount Arden. I had intended to have halted the party here for a day or two, to recruit after the severe march we had just terminated; but the weather was so favourable and the season so far advanced, that I did not like to lose an hour in following out my prospective plans.

During the homeward journey from the Mundy, I had reflected much on the position in which I

was placed, and spent many an anxious hour in deliberating as to the future. I had one of three alternatives to choose, either to give up the expedition altogether;—to cross to the Murray to the east and follow up that river to the Darling;—or by crossing over to Streaky Bay to the westward, to endeavour to find some opening leading towards the interior in that direction. After weighing well the advantages and disadvantages of each (and there were many objections to them all,) I determined upon adopting the last, for reasons which will be found in my Report sent to the Governor, and to the Chairman of the Northern Expedition Committee from Port Lincoln.* My mind having thus been made up, I knew, from former experience, that I had no time to lose, now that the weather was showery and favourable, and that if I delayed at all in putting my plans into execution I might probably be unable to cross from Mount Arden to Streaky Bay. The distance between these two points was upwards of two hundred miles, through a barren and desert region, in which, though among high ranges, I had on a former occasion been unable to discover any permanent water, and through which we could only hope to pass by taking advantage of the puddles left by the late rains; I therefore decided upon halting at the depôt to rest the horses even for a day, and the party had no sooner reached their encampment,

* Vide Chapter IX.

than, while one portion of the men took the horses up the watercourse to water, the others were employed in digging up the stores we had buried here, and in repacking and rearranging all the loads ready to move on again immediately. By the evening all the arrangements were completed and the whole party retired to rest much fatigued.

CHAPTER VIII.

PROCEED TO THE WESTWARD—CHANNEL OF COMMUNICATION BETWEEN LAKE TORRENS AND SPENCER'S GULF—BAXTER'S RANGE—DIVIDE THE PARTY—ROUTE TOWARDS PORT LINCOLN—SCRUB—FRUITLESS SEARCH FOR WATER—SEND DRAY BACK FOR WATER—PLUNDERED BY THE NATIVES—RETURN OF DRAY—DENSE SCRUB—REFUGE ROCKS—DENSE SCRUB—SALT CREEK—MOUNT HILL—DENSE SCRUB—LARGE WATERCOURSE—ARRIVE AT A STATION—RICH AND GRASSY VALLEYS—CHARACTER OF PORT LINCOLN PENINSULA—UNABLE TO PROCURE SUPPLIES—ENGAGE A BOAT TO SEND OVER TO ADELAIDE—BUY SHEEP.

September 13.—Upon leaving the depôt this morning I was obliged to leave behind a very large tarpaulin which we did not require, and which from the extra weight we had last night put upon the drays, we could not conveniently carry. Steering to the south-west we came at twelve miles to the head of Spencer's Gulf, and crossed the channel connecting it with Lake Torrens. At this place it is not very wide, but its bed like that of the lake is soft and boggy, with salt water mixed with the mud. We had a good deal of difficulty in getting over it, and one of the drays having stuck fast, we had to unload it, carrying the things over on men's backs. A few miles beyond this we halted for the night, where there was good grass for the horses and plenty of

water in the puddles around us. We crossed principally during the day, a rather heavy sandy country, but were now encamped in plains of a firmer and better character for the drays.

September 14.—Travelling on through open plains with loose gravelly stones, lying on their surface, we passed to the south of a small table-topped hill, visible from Mount Arden, and very much resembling the fragments of table land that I had met with to the north. This however was somewhat larger than those, and though steep-sided as they were it did not disclose the same white strata of chalk and gypsum, its formation being more rocky and of rather a slaty character.

September 15.—Pushing on rapidly over extensive plains very similar to those we had already crossed, we arrived, after a long stage, under Baxter's range, and encamped upon a small channel coming from it, with abundance of water and good grass. This range is high and rocky, rising abruptly out of the plains, and distinctly visible from Mount Arden, from which it is about fifty miles distant. Its formation is entirely conglomerate of rather a coarse description. Among its rugged overhanging steeps are many of the large red species of wallabie similar to those we had seen to the north at the Scott. Two of these we shot. The latitude of our camp at Baxter's range was 32° 40′ S.

September 16.—Remained in camp to-day to rest the horses and prepare for dividing the party, as

from the great abundance of rain that had fallen, I no longer apprehended a scarcity of water on the route to Streaky Bay, and therefore decided upon sending my overseer across with the party, whilst I myself took a dray down direct to Port Lincoln, on the west side of Spencer's Gulf, to obtain additional supplies, with the intention of joining them again at Streaky Bay.

Having spent some time in taking bearings from the summit of Baxter's range, I examined all the channels and gorges coming from it, and in most of these I found water. I am of opinion however that in a very dry season, the water which I now found will be quite dried up, and especially in the largest of the watercourses, or the one upon which we were encamped.*

A little further south, there is a rocky ravine winding through a gorge and terminating in a waterfall, with a large pool of beautiful water at the base, and with many large and deep holes of water in the rocks above. In this ravine I imagine water might be procured at any period of the year, and I am confirmed in this opinion by the circumstance of three well beaten native roads, coming from different points of the compass, and all converging at this place. This is an important position for parties crossing to the westward, or going overland to Port

* In October 1842, this was quite dry, but water was still found in holes in the rocks in the southernmost gorge, above the waterfall, at the base of which water was also procured by digging in the gravel.

Lincoln. Baxter's range is the nearest point at which permanent water can be procured on the west side of the head of Spencer's Gulf, as the Depôt creek near Mount Arden is on the eastern. Having completed my examination of the range, and taken all my observations, I spent the remainder of the day in constructing a chart of my former route from Streaky Bay in 1839, and in writing out instructions for the overseer during my absence, as a guide for him in crossing to the westward.

September 17.—Placing under the charge of the overseer, two drays, seven of our best horses, all the sheep, one native boy, and two men, I saw him fairly started this morning, and wished him a speedy and prosperous journey. I had left with me one dray, five horses, one man, one native boy, and Mr. Scott; with fourteen days provision and forty gallons of water. Steering S. 25° W. for sixteen miles, we halted for the night upon a patch of tolerable grass but without any water; I was consequently obliged to give a bucket of water to each of the horses out of the small stock which we had brought with us. The country we travelled through was low, level, and for the most part covered with salsolæ, or brush, the latter in some places being very dense, and causing great fatigue to the horses in dragging the dray through it.

September 18.—Upon taking a view of the country, this morning, previous to starting, it appeared so low and level, and held out so little prospect of our finding

water, that I was induced to deviate from the course I had laid down, and steering S. 20° E. made for some hills before us. After travelling four miles upon this course, I observed a native fire upon the hills at a bearing of S. 40° E. and immediately turned towards it, fully hoping that it was at a native camp and in the immediate vicinity of water.

At eight miles we were close under the hills, but found the dray could not cross the front ridges; I therefore left Mr. Scott to keep a course parallel with the range, whilst I and the native boy rode across to where we had seen the fire. Upon arriving at the spot I was greatly disappointed to find, instead of a native camp, only a few burning bushes, which had either been lit as a signal by the natives, after noticing us in the plains, or was one of those casual fires so frequently left by them on their line of march. I found the hills scrubby, barren, and rocky, with much prickly grass growing upon their slopes. There were no watercourses upon the west side of the range at all, nor could I by tracing up some short rocky valleys coming from steep gorges in the face of the hill find any water. The rock was principally of ironstone formation. Upon ascending to the summit of the hill, I had an extensive but unsatisfactory view, a vast level field of scrub stretching every where around me, interspersed here and there with the beds of small dried up lakes, but with no signs of water any where. At S. W. by S. I saw the smoke of a native fire rising in the plains. Hurry-

ing down from the range, I followed the dray, and as soon as I overtook it, halted for the night in the midst of a thick scrub of large tea-trees and minor shrubs. There was a little grass scattered among the trees, on which, by giving our horses two buckets of water each, they were able to feed tolerably well. During the day we had travelled over a very heavy sandy country and through dense brush, and our horses were much jaded. Occasionally we had passed small dried up salt lakes and the beds of salt water channels; but even these did not appear to have had any water in them for a long time.

Upon halting the party, I sent Mr. Scott to explore the range further south than I had been, whilst I myself went to search among the salt lakes to the south-west. We, however, both returned equally unsuccessful, and I now found that I should be compelled to send the dray back for a supply of water from Baxter's range. The country was so scrubby and difficult to get a dray through that our progress was necessarily slow; and in the level waste before us I had no hope of finding water for some distance further. I thought, therefore, that if the dray could bring a supply to last us for two days after leaving our present encampment, we should then be enabled to make a fresh push through a considerable extent of bad country, and might have a better chance of finding water as we advanced to the south-west.

September 19.—This morning I unloaded the dray of every thing except the water casks, and

pitching my tent among the scrub took up my quarters alone, whilst I sent back the man, the native boy, the dray, and all the horses with Mr. Scott to Baxter's range. As they made an early start, I gave them instructions to push on as rapidly as possible, so as to get to the range that night, to rest the horses next day and fill the casks with water, and on the third day, if possible, to return the whole distance and rejoin me.

Having seen them fairly away, I occupied myself in writing and charting during the day, and at night amused myself in taking stellar observations for latitude. I had already taken the altitude of Vega, and deduced the latitude to be 32° 3′ 23″ S.; leaving my artificial horizon on the ground outside whilst I remained in the tent waiting until Altair came to the meridian. I then took my sextant and went out to observe this star also; but upon putting down my hand to take hold of the horizon glass in order to wipe the dew off, my fingers went into the quicksilver—the horizon glass was gone, and also the piece of canvass I had put on the ground to lie down upon whilst observing so low an altitude as that of Vega. Searching a little more I missed a spade, a parcel of horse shoes, an axe, a tin dish, some ropes, a grubbing hoe, and several smaller things which had been left outside the tent, as not being likely to take any injury from the damp.

It was evident I was surrounded by natives, who had stolen all these things during the short time I

had been in my tent, certainly not exceeding half an hour. The night was very windy and I had heard nothing, besides I was encamped in the midst of a very dense brush of large wide-spreading tea-trees and other bushes, any of which would afford a screen for a considerable number of natives. In daylight it was impossible to see many yards in distance, and nothing could be discerned at night.

The natives must have watched the dray go away in the morning, and waited until dark for their opportunity to rob me; and most daringly and effectually had they done it. At the time that I lay on the ground, taking the star's altitude, they must have been close to me, and after I went into the tent, they doubtless saw me sitting there by the light of the candle, since the door was not quite closed, and they had come quite in front to obtain some of the things they had stolen. The only wonder with me was that they had not speared me, as they could scarcely have been intimidated by my individual presence.

As soon as I missed my horizon glass, and entertained the suspicion of natives being about, I hurried into the tent and lighting a large blue light, run with it rapidly through the bushes around me. The effect of this was very beautiful amidst the darkness and gloom of the woods, and for a great distance in every direction objects could be seen as well as by day; the natives, however, were gone, and I could only console myself by firing a couple of balls after

them through the underwood to warn them of the danger of intruding upon me again; I then put every thing which had been left outside, into the tent, and kept watch for an hour or two, but my visitors came no more. The shots, or the blue light, had effectually frightened them. They had, however, in their turn, produced as great an effect upon me, and had at least deprived me of one night's rest.

September 20.—Rising very early I set to work, with an axe, to clear away the bushes from around my tent. I now discovered that the natives had been concealed behind a large tea-tree not twenty yards from the tent; there were numerous foot-marks there, and the remains of fire-sticks which they had brought with them, for a native rarely moves at night without fire.

By working hard I cleared a large circle with a radius of from thirty to forty yards, and then piling up all the bushes outside and around the tent, which was in the centre, I was completely fortified, and my sable friends could no longer creep upon me to steal without my hearing them. I spent great part of the day in charting, and took a few angles from the tent, but did not dare to venture far away. At night, when it was dark, I mounted guard with my gun for three hours, walking round outside the tent, and firing off my gun before I lay down, which I did with my clothes on, ready to get up at a moment's notice. Nothing, however, disturbed me.

September 21.—I had been occupied during the greater part of the day in charting, and in the evening was just shouldering my gun to mount guard again, when I was delighted to see Mr. Scott returning with the dray, and the party all safe. They had executed the duty entrusted to them well, and had lost no time in rejoining me; the horses were, however, somewhat fatigued, having come all the way from the range in one day. Being now reinforced, I had no longer occasion to mount guard, and for the first time since the natives had stolen upon me, enjoyed a sound sleep.

September 22.—Moving on the party for ten miles at a course of S. 35° W., we passed through a dreadful country, composed of dense scrub and heavy sandy ridges, with some salt water channels and beds of small dry lakes at intervals. In many cases the margins bounding these were composed of a kind of decomposed lime, very light and loose, which yielded to the slightest pressure; in this our horses and drays sank deep, throwing out as they went, clouds of fine white dust on every side around them. This, added to the very fatiguing and harassing work of dragging the dray through the thick scrub and over the heavy sand ridges, almost knocked them up, and we had the sad prospect before us of encamping at night without a blade of grass for them to eat. Just at this juncture the native boy who was with me, said he saw rocks in one of the distant sand hills, but upon examining

the place with a telescope I could not make out distinctly whether they were rocks or only sand. The boy however persisted that there were rocks, and to settle the point I halted the dray in camp, whilst I proceeded with him to the spot to look.

At seven miles W. 10° S. of the drays we reached the ridge, and to my great delight I found the boy was right; he had seen the bare sheets of granite peeping out near the summit of a sandy elevation, and in these we found many holes with water in them. At the base of the hill too, was an opening with good grass around, and a fine spring of pure water. Hastening back to the dray, I conducted the party to the hills, which I named Refuge Rocks, for such they were to us in our difficulties, and such they may be to many future travellers who may have to cross this dreary desert.

From the nature of the road and the exhausted state of our horses, it was very late when we encamped, but as the position was so favourable a one to recruit at, I determined to take advantage of it, and remain a couple of days for that purpose.

September 23.—Leaving my party to rest, after the fatigue they had endured in forcing a way through the scrub, I set off after breakfast to reconnoitre our position at Refuge Rocks, and to take a series of angles. The granite elevation, under which we were encamped, I found to be one of three small hills, forming a triangle, about a mile apart from each other, and having sheets of granite

lying exposed upon their summits, containing deep holes which receive and retain water after rains. The hill we were encamped under, was the highest of the three, and the only one under which there was a spring.* There was also better grass here than around either of the other two; it appeared, too, to be the favourite halting place of the natives, many of whose encampments still remained, and some of which appeared to have been in use not very long ago. The bearings from the hill we were under, of the other two elevations, which, with it, constitute the Refuge Rocks, were N. 15° W. and W. 35° N. Baxter's range was still visible in the distance, appearing low and wedge-shaped, with the high end towards the east, at a bearing of N. 24° E. In the western extreme it bore N. 22° E. Many other hills and peaks were apparent in various directions, to all of which I took angles, and then returned to the tent to observe the sun's meridian altitude for latitude. By this observation, I made the latitude 33° 11′ 12″ S.; but an altitude of Altair at night only gave 33° 10′ 6″ S.; probably the mean of the two, or 33° 10′ 39″ S., will be very nearly the true position of the spring. From the summit of the hill I had been upon, many native fires were visible in the scrub, in almost every direction around. At one time I counted eleven different fires from the smokes that were ascending, and some

* This was dried up in October, 1842.

of which were very near us. Judging from these facts, the natives appeared to be numerous in this part of the country, and it would be necessary to be very cautious and vigilant after the instance I had recently met with of their cunning and daring.

September 24.—I still kept my party in camp to refresh the horses, and occupied myself during the morning in preparing a sketch of my route to the north, to send to the Governor from Port Lincoln. In the afternoon, I searched for a line of road for our drays to pass, on the following day, through the scrubby and sandy country, which still appeared to continue in every direction.

September 25.—Leaving Refuge Rocks, at a course of S. 37° W., we passed over a wretched country, consisting principally of heavy sandy ridges, very densely covered with scrub, and giving our horses a severe and fagging day's work to get the dray along for only twelve miles. I then halted, as we were fortunate enough to find an opening in the scrub, with good grass. Searching about our encampment, I found in a small valley at one end of the little plain, a round hole, dug by the natives, to catch the drainage from the slope above it. There were two or three quarts of water in this hole when we discovered it; but by enlarging it, we managed to fill a bucket once every hour from the water which drained into it. This enabled us to save, to some extent, the water we had in our casks, at the same time that all the horses had as much as they

could drink. I took angles from the camp to all the hills in sight, and at night made the latitude of the tent 33° 18′ 34″ S. by an altitude of à Cygnus.

September 26.—After travelling for thirteen miles at S. 40° W., I took a set of angles from a low scrubby hill, being the last opportunity I should have of setting many of the heights, of which I had obtained bearings from former camps. I then changed our course to S. 27° W. for five miles, and halted for the night where there was good grass. We could find no water during the day; I had, consequently, to give the horses some out of the casks. The country we traversed had altered greatly in character, and though still heavy and sandy, it was a white coarse gritty sand, instead of a fine red; and instead of the dense eucalyptus scrub, we had now low heathy shrubs which did not present much impediment to the progress of the dray, and many of which bore very beautiful flowers. Granite was frequently met with during the day, but no water could be found. Our latitude by an altitude of à Aquilæ was 33° 30′ S.

September 27.—Continuing our last night's course for about seven miles, we passed through the densest scrub I had yet met with; fortunately, it was not growing upon a sandy soil, and we got tolerably well through it, but the horses suffered severely. Upon emerging from the brush, I noticed a little green looking valley, about a mile off our track, and sent Mr. Scott to see if there was water

there. Upon his return, he reported that there was, and I at once moved down to it, to rest the horses after the toil of breaking through the scrub. The day was not far advanced when we halted, and I was enabled to obtain the sun's altitude at noon, making the latitude of the camp 33° 34′ 25″ S. There was good grass for the horses, and abundance of water left by the rains in the hollows of a small watercourse, running between two scrubby ridges.

September 28.—Making an early start, we crossed at four and a half miles, a low scrubby range, and there found, upon the left of our track, some very pretty grassy hills, and a valley lightly wooded with casuarinæ. Whilst I went on with the party, I detached Mr. Scott to see if there was water at this little patch of good country, but he did not find any. I am still of opinion, however, that if more time for examination had been allowed, springs would have been discovered not far away, as every thing looked so green and luxuriant, and formed so strong a contrast to the country around.

Pushing on steadily, we crossed over many undulations, coated on the surface either with sand or breccia, and frequently having a good deal of the eucalyptus scrub upon them, at eleven miles we passed a long grassy plain in the scrub, and once or twice crossed small openings with a little grass. For one of these we directed our course, late in the evening, to encamp; upon reaching it, however, we were greatly disappointed to find it covered only

by prickly grass. I was therefore obliged, after watering the horses from the casks, to send them a mile and half back to some grass we had seen, and where they fared tolerably well. Our day's journey had been long and fatiguing, through a barren, heavy country. One mile before encamping, we crossed the bed of a salt water channel, trending to the westward, which was probably connected with the Lagoon Harbour of Flinders, as it appeared to receive the flood tide. Our latitude was 33° 50′ S. by observation of à Aquilæ.

September 29.—Whilst the man was out looking for the horses, which had strayed a little during the night, I took a set of angles to several heights, visible from the camp; upon the man's return, he reported that he had found some fresh water, but upon riding to the place, I found it was only a very small hole in a sheet of limestone rock, near the salt watercourse, which did not contain above a pint or two. The natives, however, appeared to come to this occasionally for their supply; similar holes enabling them frequently to remain out in the low countries long after the rain has fallen. After seeing the party move on, with the native boy to act as guide through the scrub, I rode in advance to search for water at the hill marked by Flinders as Bluff Mount, and named by Colonel Gawler, Mount Hill. This isolated elevation rises abruptly from the field of scrub, in the midst of which it is situated and is of granite formation; nearly at its summit is

an open grassy plain, which was visible long before we reached it, and which leads directly over the lowest or centre part of the range; water was found in the holes of rock in the granite, and the grass around was very tolerable. Having ascertained these particulars, I hurried back to the drays to conduct them to a place of encampment. The road was very long and over a heavy sandy country, for the most part densely covered with scrub, and it was late, therefore, when we reached the hill. The horses, however, had good feed and fair allowance of water, but of the latter they drank every drop we could find. During our route to-day, I noticed some little distance to the north-west of our track, a high scrubby range, having clear grassy-looking openings at intervals. In this direction, it is probable that a better line of road might be found than the one we had chosen.

September 30.—After breakfast, I ascended to the summit of Mount Hill, and took a set of angles; whilst the dray wound up the gap between it and another low summit, with which it is connected. Upon descending the hill on the opposite side, I was rejoiced to find two very large pools of water in some granite rocks, one of them appearing to be of a permanent character. Here I halted for an hour and a half, to give the horses a little more water, and fill our casks again before we faced the scrubby waste that was still seen ahead of us. I had been last night within fifty yards of the pools that we

now found, but had not discovered them, as the evening was closing in at the time, and I was in great haste to return to my party before dark. Leaving Mount Hill at the course of S. 27° W. we passed through a very dense scrub, the strongest, I think, we had yet experienced; the drays were tearing down the brush with loud crashes, at every step which the horses took, and I could only compare their progress to the effect produced by the efforts of a clearing party, the brush rapidly disappearing before the wheels, and leaving almost as open a road as if it had been cut away by axes; the unfortunate animals, however, had to bear the *onus* of all, and most severely were they harassed before our short stage was over. At twelve miles we came to a large rocky watercourse of brackish water, trending to the east-north-east, through a narrow valley bounded by dense scrub. In this we found pools of fresh water, and as there was good grass, I called a halt about three in the afternoon. We were now able, for the first time for several hundred miles, to enjoy the luxury of a swim, which we all fully appreciated. In the afternoon Mr. Scott shot six ducks in the pools, which furnished us with a most welcome addition to our very scanty fare. For two days previous to this, we had been subsisting solely upon a very limited allowance of dry bread, having only taken fourteen days provisions with us from Baxter's range, which was nearly all expended, whilst we were yet at least two days journey from Port Lincoln. At night I observed the latitude of

our camp, by à Aquilæ 34° 12′ 52″ S. by β Leonis 34° 12′ 35″ S. and assumed the mean of the two, or 34° 12′ 43″ as the correct one.

October 1.—Making an early start we passed at three miles the head of the watercourse we had been encamped upon, and then ascended some scrubby ranges, for about five miles further, when we entered into a narrow tract of good grassy country, which at five miles brought us to Mr. Driver's station; a Mr. Dutton was living at this place as Mr. Driver's manager, and by him we were very hospitably received, and furnished with such supplies as we required.*

It was a cattle station, and abounded with milk and butter, luxuries which we all fully enjoyed after our long ramble in the wilds. Having halted my party for the day, Mr. Scott and myself dined at Mr. Dutton's, and learnt the most recent news from Adelaide and Port Lincoln. We had much to hear and much to inquire about, for even in the few months of our absence, it was to be presumed, that many changes would have taken place in the fluctuating affairs of a new colony. Nor were our conjectures wrong.

That great reaction which was soon to convulse all

* In 1842, Mr. Dutton attempted to take some cattle overland, from this station to the head of Spencer's Gulf; both he and his whole party perished in the desert, (as supposed) from the want of water. In October of that year, I was sent by Government to search for their remains, but as it was the dry season, I could not follow up their tracks through the arid country they had advanced into. The cattle returned.

the Australian Colonies generally, to annihilate all mercantile credit, and render real property comparatively valueless, had already commenced in South Australia; failures, and rumours of failures, were of daily occurrence in Adelaide, and even the little settlement of Port Lincoln had not escaped the troubles of the times. I learnt with regret that it was rapidly falling into decay, and its population diminishing. Many had already deserted it, and amongst them I was surprised to hear of the departure of Captain Porter and others, who were once the most enthusiastic admirers and the staunchest supporters of this embryo town. That which however affected me more particularly was the fear, that from the low and impoverished state to which the place was now reduced, I should not be able to obtain the supplies I required for my party, and should probably have to delay until I could send over to Adelaide for what I wanted, even supposing I was lucky enough to find a vessel to go across for me. In walking round Mr. Dutton's farm I found he was ploughing up some land in the valley for wheat, which appeared to be an excellent soil, and the garden he had already commenced was looking promising. At night I obtained the altitude of à Aquilæ, by which I placed Mr. Driver's station in 34° 21′ 20″ S. lat., or about 22 miles of lat. north of Kirton Point.

October 2.—Before leaving the station I purchased from Mr. Dutton a little Timor pony

for £25. for one of the native boys to ride, to replace in some measure the services of the animal I had been obliged to have shot up to the north. The only objection to my new purchase was that it was a little mare and already forward in foal. At Port Lincoln, however, I was not likely to meet with any horses for sale, and did not therefore deem it prudent to lose the only opportunity that might occur of getting an animal of some kind. After quitting Mr. Dutton's, I followed a dray road leading towards Port Lincoln. For the most part we passed through green valleys with rich soil and luxuriant pasturage, but occasionally intersected by poor sandy or gravelly soil of a saline nature; the water was abundant from recent heavy rains, and some of the pools fresh; others, however, were very brackish. The hills adjoining the valley were grassy, and lightly wooded on their slopes facing the valley; towards the summits they became scrubby, and beyond, the scrub almost invariably made its appearance. Altogether we passed this day through a considerable tract of country, containing much land that is well adapted for sheep or cattle, and with a fair proportion suitable for agriculture. It is by far the best portion of the available country in the Port Lincoln peninsula, and I could not help regretting it should be so limited in extent. I had now travelled all the three sides of the triangle, and had obtained extensive views from various heights along each of these lines of route; I had crossed

from Port Lincoln to Streaky Bay, from Streaky Bay to the head of Spencer's Gulf, and from the head of Spencer's Gulf down to Port Lincoln again. In the course of these journeys, I had spared no toil nor exertion, to make my examination as complete and as useful as possible, though my labours were not rewarded by commensurate success. The great mass of the peninsula is barren, arid, and worthless; and although Port Lincoln possesses a beautiful, secure, and capacious harbour, with a convenient and pretty site for a town, and immediately contiguous to which there exists some extent of fine and fertile soil, with several good grassy patches of country beyond; yet it can never become a large or important place, in consequence of its complete isolation, except by water, from every other, and the limited nature of its own resources.

For one or two large stock-holders, who wish to secure good grazing ground, and be apart from others, it might answer well, but even they would ordinarily labour under difficulties and disadvantages which would make their situation not at all desirable. The uncertainty and expense of procuring their supplies — of obtaining labour, and of finding a market for their surplus stock,* and the almost total

* Pastoral settlers have left Port Lincoln in consequence of these disadvantages — but it is possible that a comparatively large population may locate there, hereafter, should mineral resources be found out. Such discoveries are said to have been made, but I am not aware upon whose authority the report has become current.

impossibility of their being able to effect sales in the event of their wishing to leave, would perhaps more than counterbalance the advantages of having the country to themselves. Purchased in the days of wild and foolish speculation, and when a rage existed for buying land and laying out townships, no place has been more misrepresented or misunderstood than Port Lincoln. Many gross and glaring misstatements have been put forth of its character and capabilities, by those who were actuated by interested motives, and many unintentional misrepresentations have been made and perpetuated by others, whose judgment or information has led them into error, so that the public generally, and especially the English public, have had no means of discriminating between the widely conflicting accounts that have been given. Amongst the persons from whom this small settlement has suffered disparagement there are none, perhaps, more blameable than those who have put forth statements which ascribe to it advantages and qualities that it does not possess; for just in proportion as the expectation of intending settlers have been raised by exaggeration or untruths has been their disappointment and disgust, when the facts themselves have stared them in the face.

The day of hallucination has now passed away, but out of the reaction which has succeeded it, has arisen a disposition to deprive Port Lincoln of even the merits to which it really has a legi-

timate claim, and which would have been far more highly appreciated, if the previous misstatements and consequent disappointments had not induced a feeling of suspicion and distrust not easily effaced.

Our stage to-day was twenty-five miles, over a pretty good road, which brought us towards evening under the range contiguous to the township. In one of the valleys leading from these hills on their west side we found a small spring of good water, and as the grass around us was very abundant and of the most luxuriant growth, I at once decided upon making this our resting place, until I had completed my arrangements for procuring supplies, and was again ready to move onwards.

October 3.—Leaving our horses to enjoy the good quarters we had selected for them, and a respite from their labours, Mr. Scott and I walked across the range into Port Lincoln, not a little surprising the good people there, who had not heard of our coming, and who imagined us to be many hundreds of miles away to the north. Calling upon Dr. Harvey, the only Government officer then at the settlement, I learnt with regret that it was quite impossible for me to procure the supplies I required in the town, whilst there were no vessels in the port, except foreign whalers, who were neither likely to have, nor be willing to part with the things I should require. What to do under such circumstances was rather a difficult question, and my principal hope

was that some small coasting vessel might arrive in the course of a few days, or if not, I might try to hire a whale boat from one of the whaling vessels, and send her on to Adelaide. Dr. Harvey had a small open boat of four or five tons, but he did not seem willing to let her go ; and unless I could communicate with Adelaide, flour was the only article I could procure, and that not from the stores in the town, but from a small stock belonging to the Government, which had been sent over to meet any emergency that might arise in so isolated a place. This was placed under the charge of Dr. Harvey, who, on behalf of the Government, kindly offered to let me have what I required, on condition that I would replace the same quantity, by the first opportunity.

Having made arrangements for a supply of fresh meat and a few vegetables during my stay, I walked out to examine the settlement. I found many neat cottages and other improvements since I had been here in 1839 ; and there were also a few gardens commenced, some of which were in a state of cultivation and appeared to be doing well. The population, however, had decreased, and many of the cottages were now unoccupied. Those who remained were principally persons who had lost everything, and who could not well get away, or who, on the other hand, had invested their property in the place, and could not leave it except at the sacrifice of almost everything they possessed. No one seemed to be

doing well but the inn-keeper, and he owed his success chiefly to the custom or traffic of the foreign whalers who occasionally resorted here for refreshments. The stockholders, living a few miles from town, who ought to have succeeded the best, were getting dissatisfied at the many disadvantages which they laboured under, and the smallness of the community around them, and every thing wore a gloomy aspect.

October 4.—After breakfast, accompanied by Mr. Scott, I went to Port Lincoln to attend divine service; prayers were read by Dr. Harvey. The congregation was small but respectable, and apparently devout. After church, we accompanied Dr. Harvey home to dinner, and met the Captain and Surgeon of one of the French whalers in port; both of whom appeared intelligent, and superior to the class usually met with in such employments. After dinner we all walked down to the lagoon, west of Port Lincoln, where the land is of a rich black alluvial character, and well adapted for cultivation. Returning by our tents, Dr. Harvey and the Frenchmen took tea with us, and then returned to the settlement. In the course of our walk this afternoon, Dr. Harvey offered to put a temporary hatch over his boat, and send her to Adelaide for me for ten pounds, which offer I at once accepted, and Mr. Scott volunteered to go in her as supercargo.

October 5.—To-day I employed myself in writing letters, whilst the dray went to Port Lincoln for

supplies. The few things I could get there were very dear, meat 1*s.* per pound, potatoes 9*d.* per pound, salt butter 2*s.* 6*d.*, a small bag, with a few old cabbage stumps, five or six shillings, and other things in proportion.

October 6.—Went to town, accompanied by Mr. Scott to inspect the preparations of the little cutter he was to go to Adelaide in ;—ordered all our horses to be shod, and several spare sets of shoes to be made to take up to the party at Streaky Bay. On our return we were accompanied by Mr. Smith, who kindly went with Mr. Scott to the station of a Mr. Brown,* about ten miles away, to select sheep to take with us on our journey. Mr. Scott purchased twelve at £2. each, and brought them to the station ; they were not very large, but were in fine condition.

* Since murdered by the natives.

CHAPTER IX.

BOY SPEARED BY THE NATIVES—ANOMALOUS STATE OF OUR RELATIONS WITH THE ABORIGINES—MR. SCOTT SAILS FOR ADELAIDE—DOG BOUGHT—MR. SCOTT'S RETURN—CUTTER WATERWITCH SENT TO CO-OPERATE—SEND HER TO STREAKY BAY—LEAVE PORT LINCOLN WITH THE DRAY—LEVEL SANDY COUNTRY CLOTHED WITH BRUSH AND SHRUBS—SALT LAKES—MOUNT HOPE—LAKE HAMILTON—STONY COUNTRY—LOSE A DOG—BETTER COUNTRY—WEDGE HILL—LAKE NEWLAND—A BOAT HARBOUR—MOUNT HALL—REJOIN PARTY AT STREAKY BAY—SINGULAR SPRING—CHARACTER OF COUNTRY—BEDS OF OYSTERS.

October 6.—In the course of the afternoon I learnt that a little boy about twelve years old, a son of Mr. Hawson's, had been speared on the previous day by the natives, at a station about a mile and a half from my tent. The poor little fellow had, it seems, been left alone at the station, and the natives had come to the hut and speared him. The wounds were of that fatal character, being from barbed spears which had remained in the flesh, that no hopes could be entertained of his surviving their removal. The following account of the occurrence is extracted from a report, on the subject, to the Government by Dr. Harvey, the Colonial Surgeon at Port Lincoln, who attended the boy in his last sufferings.

"The poor boy has borne this heavy affliction with the greatest fortitude, assuring us "that he is not afraid to die." He says that on Monday (5th), he was left in the station hut whilst his brother came into town, and that about ten or eleven natives surrounded his hut, and wished for something to eat. He gave them bread and rice—all he had, and as they endeavoured to force themselves into his hut, he went out and fastened the door, standing on the outside with his gun by his side and a sword in his hand, which he held for the purpose of fighting them. He did not make any signs of using them. One of the children gave him a spear to throw, and while in the act of throwing it, he received the two spears in his chest—he did not fall. He took up his gun and shot one of the natives, who fell, but got up again and ran away; they all fled, but returned and shewed signs of throwing another spear, when he lifted the gun a second time, upon which they all made off.

"He remained with the two spears, seven feet long, sticking in his breast; he tried to cut and saw them without effect; he also tried to walk home, but could not; he then sat upon the ground and put the ends of the spears in the fire to try to burn them off, and in this position he was found at ten o'clock at night, upon the return of his brother Edward (having been speared eleven hours.) He immediately sawed the ends of the spears off, and placed him on horseback, and brought him into town, when I saw him.

"Mr. Smith (with the police force) has gone in search of the natives, one of whom can be identified as having thrown a spear at the boy, he having a piece of red flannel tied round his beard.

"This circumstance has thrown the settlement into great distress. The German missionary, Rev. Mr. Schurman, has gone with Mr. Smith. I am told that the natives have been fired at from some of the stations. I hope this is not the case. The Rev. Mr. Schurman says that Mr. Edward Hawson told him he shot after some a short time ago to frighten them, after they had stolen something from the same hut where they speared his brother. This is denied by the family, but I will ascertain the

truth upon the return of the party, Mr. E. Hawson having accompanied them."

The natives immediately disappeared from the vicinity of the settlement, and were not heard of again for a long time. Such is the account of this melancholy affair as given to Dr. Harvey by the boy, who, I believe, also made depositions before a magistrate to the same effect. Supposing this account to be true, and that the natives had not received any previous provocation either from him or from any other settlers in the neighbourhood, this would appear to be one of the most wanton, cold blooded, and treacherous murders upon record, and a murder seemingly as unprovoked as it was without object. Had the case been one in which the European had been seen for the first time by the aboriginal inhabitants of the country, it would have been neither surprising nor at variance with what more civilised nations would probably have done under circumstances of a similar nature. Could we imagine an extraordinary looking being, whose presence and attributes were alike unknown to us, and of a nature to excite our apprehensions, suddenly appearing in any part of our own country, what would be the reception he would meet with among ourselves, and especially if by locating himself in any particular part of the country he prevented us from approaching those haunts to which we had been accustomed from our infancy to resort, and which we looked upon as sacred to ourselves? It

is not asserting too much to say that in such a case the country would be raised in a hue and cry, and the intruder would meet with the fate that has sometimes befallen the traveller or the colonist when trespassing upon the dominions of the savage.

In the present lamentable instance, however, the natives could not have acted under the influence of an impulse like this. Here the Europeans had been long located in the neighbourhood, they were known to, and had been frequently visited by the Aborigines, and the intercourse between them had in some instances at least been of a friendly character. What then could have been the inducement to commit so cold and ruthless an act? or what was the object to be attained by it? Without pausing to seek for answers to these questions which, in the present case, it must be difficult, if not impossible, to solve, it may be worth while to take a view of the conduct of the Aborigines of Australia, generally, towards the invaders and usurpers of their rights, setting aside altogether any acts of violence or injury which they may have committed under the influence of terror, naturally excited by the first presence of strangers among them, and which arise from an impulse that is only shared by them in common with mankind generally. I shall be borne out, I think, by facts when I state that the Aborigines of this country have seldom been guilty of wanton or unprovoked outrages, or committed acts of rapine or bloodshed, without some strongly

exciting cause, or under the influence of feelings that would have weighed in the same degree with Europeans in similar circumstances. The mere fact of such incentives not being clearly apparent to us, or of our being unable to account for the sanguinary feelings of natives in particular cases, by no means argues that incentives do not exist, or that their feelings may not have been justly excited.

If we find the Aborigines of Australia ordinarily acting under the influence of no worse motives or passions than usually actuate man in a civilised state, we ought in fairness to suppose that sufficient provocative for retaliation has been given in those few instances of revenge, which, our imperfect knowledge of the circumstances attending them does not enable us satisfactorily to account for. In considering this question honestly, we must take into account many points that we too often lose sight of altogether when discussing the conduct of the natives, and more especially when we are doing so under the excitement and irritation arising from recent hostilities. We should remember:—

First, That our being in their country at all is, so far as their ideas of right and wrong are concerned, altogether an act of intrusion and aggression.

Secondly, That for a very long time they cannot comprehend our motives for coming amongst them, or our object in remaining, and may very naturally imagine that it can only be for the purpose of dispossessing them.

Thirdly, That our presence and settlement, in any particular locality, do, in point of fact, actually dispossess the aboriginal inhabitants.*

Fourthly, That the localities selected by Europeans, as best adapted for the purposes of cultivation, or of grazing, are those that would usually be equally valued above others, by the natives themselves, as places of resort, or districts in which they could most easily procure their food. This would especially be the case in those parts of the country where water was scarce, as the European always locates himself close to this grand necessary of life. The injustice, therefore, of the white man's intrusion upon the territory of the aboriginal inhabitant, is aggravated greatly by his always occupying the best and most valuable portion of it.

Fifthly, That as we ourselves have laws, customs, or prejudices, to which we attach considerable importance, and the infringement of which we consider either criminal or offensive, so have the natives theirs, equally, perhaps, dear to them, but which, from our ignorance or heedlessness, we may be continually violating, and can we wonder that they should sometimes exact the penalty of infraction? do not we do the same? or is ignorance a more valid excuse for civilized man than the savage?

Sixthly, What are the relations usually subsisting between the Aborigines and settlers, locating in the more distant, and less populous parts of the country;

* Vide, Notes on the Aborigines, chap. I.

those who have placed themselves upon the outskirts of civilization, and who, as they are in some measure beyond the protection of the laws, are also free from their restraints? A settler going to occupy a new station, removes, perhaps, beyond all other Europeans, taking with him his flocks, and his herds, and his men, and locates himself wherever he finds water, and a country adapted for his purposes. At the first, possibly, he may see none of the inhabitants of the country that he has thus unceremoniously taken possession of; naturally alarmed at the inexplicable appearance, and daring intrusion of strangers, they keep aloof, hoping, perhaps, but vainly, that the intruders may soon retire. Days, weeks, or months pass away, and they see them still remaining. Compelled at last, it may be by enemies without, by the want of water in the remoter districts, by the desire to procure certain kinds of food, which are peculiar to certain localities, and at particular seasons of the year, or perhaps by a wish to revisit their country and their homes, they return once more, cautiously and fearfully approaching what is their own—the spot perhaps where they were born, the patrimony that has descended to them through many generations; — and what is the reception that is given them upon their own lands? often they are met by repulsion, and sometimes by violence, and are compelled to retire again to strange aud unsuitable localities. Passing over the fearful scenes of horror and bloodshed, that have but too frequently been perpe-

trated in all the Australian colonies upon the natives in the remoter districts, by the most desperate and abandoned of our countrymen; and overlooking, also, the recklessness that too generally pervades the shepherds and stock-keepers of the interior, with regard to the coloured races, a recklessness that leads them to think as little of firing at a black, as at a bird, and which makes the number they have killed, or the atrocities that have attended the deeds, a matter for a tale, a jest or boast at their pothouse revelries; overlooking these, let us suppose that the settler is actuated by no bad intentions, and that he is sincerely anxious to avoid any collision with the natives, or not to do them any injury, yet under these even comparatively favourable circumstances, what frequently is the result? The settler finds himself almost alone in the wilds, with but few men around him, and these, principally occupied in attending to stock, are dispersed over a considerable extent of country; he finds himself cut off from assistance, or resources of any kind, whilst he has heard fearful accounts of the ferocity, or the treachery of the savage; he therefore comes to the conclusion, that it will be less trouble, and annoyance, and risk, to keep the natives away from his station altogether; and as soon as they make their appearance, they are roughly waved away from their own possessions: should they hesitate, or appear unwilling to depart, threats are made use of, weapons perhaps produced, and a show, at least, is made of an offensive character, even if no stronger measures be resorted to.

What must be the natural impression produced upon the mind of the natives by treatment like this? Can it engender feelings otherwise than of a hostile and vindictive kind; or can we wonder that he should take the first opportunity of venting those feelings upon his aggressor?

But let us go even a little further, and suppose the case of a settler, who, actuated by no selfish motives, and blinded by no fears, does not discourage or repel the natives upon their first approach; suppose that he treats them with kindness and consideration (and there are happily many such settlers in Australia), what recompense can he make them for the injury he has done, by dispossessing them of their lands, by occupying their waters, and by depriving them of their supply of food? He neither does nor can replace the loss. They are sometimes allowed, it is true, to frequent again the localities they once called their own, but these are now shorn of the attractions which they formerly possessed—they are no longer of any value to them—and where are they to procure the food that the wild animals once supplied them with so abundantly? In the place of the kangaroo, the emu, and the wallabie, they now see only the flocks and herds of the strangers, and nothing is left to them but the prospect of dreary banishment, or a life of misery and privation. Can it then be a matter of wonder, that under such circumstances as these, and whilst those who dispossessed them, are revelling in plenty near them, they should sometimes be tempted to appropriate a portion of the superabundance they

see around them, and rob those who had first robbed them? The only wonder is, that such acts of reprisal are so seldom committed. Where is the European nation, that thus situated, and finding themselves, as is often the case with the natives, numerically and physically stronger than their oppressors, would be guilty of so little retaliation, of so few excesses? The eye of compassion, or of philanthropy, will easily discover the anomalous and unfavourable position of the Aborigines of our colonies, when brought into contact with the European settlers. They are strangers in their own land, and possess no longer the usual means of procuring their daily subsistence; hungry, and famished, they wander about begging among the scattered stations, where they are treated with a familiarity by the men living at them, which makes them become familiar in turn, until, at last, getting impatient and troublesome, they are roughly repulsed, and feelings of resentment and revenge are kindled. This, I am persuaded, is the cause and origin of many of the affrays with the natives, which are apparently inexplicable to us. Nor ought we to wonder, that a slight insult, or a trifling injury, should sometimes hurry them to an act apparently not warranted by the provocation. Who can tell how long their feelings had been rankling in their bosoms; how long, or how much they had borne; a single drop will make the cup run over, when filled up to the brim; a single spark will ignite the mine, that, by its explosion, will scatter destruc-

tion around it; and may not one foolish indiscretion, one thoughtless act of contumely or wrong, arouse to vengeance the passions that have long been burning, though concealed? With the same dispositions and tempers as ourselves, they are subject to the same impulses and infirmities. Little accustomed to restrain their feelings, it is natural, that when goaded beyond endurance, the effect should be violent, and fatal to those who roused them;—the smothered fire but bursts out the stronger from having been pent up; and the rankling passions are but fanned into wilder fury, from having been repressed.

Seventhly, There are also other considerations to be taken into the account, when we form our opinion of the character and conduct of the natives, to which we do not frequently allow their due weight and importance, but which will fully account for aggressions having been committed by natives upon unoffending individuals, and even sometimes upon those who have treated them kindly. First, that the native considers it a virtue to revenge an injury. Secondly, if he cannot revenge it upon the actual individual who injured him, he thinks that the offence is equally expiated if he can do so upon any other of the same race; he does not look upon it as the offence of an individual, but as an act of war on the part of the nation, and he takes the first opportunity of making a reprisal upon any one of the enemy who may happen to fall in his way; no

matter whether that person injured him or not, or whether he knew of the offence having been committed, or the war declared. And is not the custom of civilized powers very similar to this? Admitting that civilization, and refinement, have modified the horrors of such a system, the principle is still the same. This is the principle that invariably guides the native in his relations with other native tribes around him, and it is generally the same that he acts upon in his intercourse with us. Shall we then arrogate to ourselves the sole power of acting unjustly, or of judging of what is expedient? And are we to make no allowance for the standard of right by which the native is guided in the system of policy he may adopt? Weighing candidly, then, the points to which reference has been made, can we wonder, that in the outskirts of the colony, where the intercourse between the native and the European has been but limited, and where that intercourse has, perhaps, only generated a mutual distrust; where the objects, the intentions, or the motives of the white man, can neither be known nor understood, and where the natural inference from his acts cannot be favourable, can we wonder, that under such circumstances, and acting from the impression of some wrong, real or imagined, or goaded on by hunger, which the white man's presence prevents him from appeasing, the native should sometimes be tempted to acts of violence or robbery? He is only doing what his habits and ideas have taught him to think

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Native Graves

commendable. He is doing what men in a more civilized state would have done under the same circumstances, what they daily do under the sanction of the law of nations—a law that provides not for the safety, privileges, and protection of the Aborigines, and owners of the soil, but which merely lays down rules for the direction of the privileged robber in the distribution of the booty of any newly discovered country. With reference to the particular case in question, the murder of Master Hawson, it appears from Dr. Harvey's report (already quoted), that in addition to any incentives, such as I have described, as likely to arise in the minds of the natives, there had been the still greater provocation of their having been fired at, but a short time previously, from the same station, and by the murdered boy's brother. We may well pause, therefore, ere we hastily condemn, or unjustly punish, in cases where the circumstances connected with their occurrence, can only be brought before us in a partial and imperfect manner.

The 7th was spent in preparing my despatches for Adelaide. On the 8th I sent in a dray to Port Lincoln, with Mr. Scott's luggage, and those things that were to be sent to Adelaide, comprising all the specimens of geology and botany we had collected, a rough chart of our route, and the despatches and letters which I had written. The boat was not ready at the time appointed, and Mr. Scott returned to the tents. In the evening, however, he again went

to the settlement, and about ten, P.M., he, and the man who was to manage the boat, went on board to sail for Adelaide. I had been taken very ill during the day, and was unable to accompany him to the place of embarkation. The following is a copy of my despatch to the Governor, and to the Chairman of the Northern Expedition Committee, embodying my reasons for going to the westward.

"*Port Lincoln, October*, 1840.

"SIR,—Having fallen back upon Port Lincoln for supplies, an opportunity has occurred to me of writing a brief and hurried report of our proceedings. I have, therefore, the honour to acquaint you, for the information of His Excellency, the Governor, and the colonists interested in the Northern Expedition, with the result of my examination of the country north of Spencer's Gulf, and of the further steps I contemplate taking to endeavour to carry out the wishes of the Committee, and accomplish the object for which the expedition was fitted out.

"Upon leaving our depôt, near Mount Arden, the low, arid, and sandy nature of the country between the hills and Lake Torrens, compelled us to follow close under the continuation of Flinders range. Here our progress was necessarily very slow, from the rugged nature of the country, the scarcity of water, and the great difficulty both of finding and obtaining access to it. As we advanced, the hills inclined considerably to the eastward, gradually becoming less elevated, until, in latitude 29° 20′ S., they ceased altogether, and we found ourselves in a very low and level country, consisting of large stony plains, varied occasionally by sand; and the whole having evidently been subject to recent and extensive inundation. These plains are destitute of water, grass, and timber, and have only a few salsolaceous plants growing upon them; whilst their surface, whether stony or sandy, is quite smooth and even, as if washed so by the action of

the water. Throughout this level tract of country were interspersed, in various directions, many small flat-topped elevations, varying in height from 50 to 300 feet, and almost invariably exhibiting precipitous banks. These elevations are composed almost wholly of a chalky substance, coated over on the upper surface by stones, or a sandy soil, and present the appearance of having formed a table land that has been washed to pieces by the violent action of water, and of which these fragments now only remain. Upon forcing a way through this dreary region, in three different directions, I found that the whole of the low country round the termination of Flinders range, was completely surrounded by Lake Torrens, which, commencing not far from the head of Spencer's Gulf, takes a circuitous course of fully 400 miles, of an apparent breadth of from twenty to thirty miles, following the sweep of Flinders range, and almost encircling it in the form of a horse shoe.

"The greater part of the vast area contained in the bed of this immense lake, is certainly dry on the surface, and consists of a mixture of sand and mud, of so soft and yielding a character, as to render perfectly ineffective all attempts either to cross it, or reach the edge of the water, which appears to exist at a distance of some miles from the outer margin. On one occasion only was I able to taste of its waters; in a small arm of the lake near the most north-westerly part of it, which I visited, and here the water was as salt as the sea. The lake on its eastern and southern sides, is bounded by a high sandy ridge, with salsolæ and some brushwood growing upon it, but without any other vegetation. The other shores presented, as far as I could judge, a very similar appearance; and when I ascended several of the heights in Flinders range—from which the views were very extensive, and the opposite shores of the lake seemed to be distinctly visible—no rise or hill of any kind could ever be perceived, either to the west, the north, or the east; the whole region around appeared to be one vast, low, and dreary waste. One very high and prominent summit in this range, I have

named Mount Serle; it is situated in 30° 30′ south latitude, and about 139° 10′ east longitude, and is the first point from which I obtained a view of Lake Torrens to the eastward of Flinders range, and discovered that I was hemmed in on every side by a barrier it was impossible to pass. I had now no alternative left me, but to conduct my party back to Mount Arden, and then decide what steps I should adopt to carry out the objects of the expedition. It was evident, that to avoid Lake Torrens, and the low desert by which it is surrounded, I must go very far either to the east or to the west before again attempting to penetrate to the north.

"My party had already been upwards of three months absent from Adelaide, and our provisions were too much reduced to admit of our renewing the expedition in either direction, without first obtaining additional supplies. The two following were therefore the only plans which appeared feasible to me, or likely to promote the intentions of the colonists, and effect the examination of the northern interior:—

"First—To move my party to the southward, to endeavour to procure supplies from the nearest stations north of Adelaide, and then, by crossing to the Darling, to trace that river up until I found high land leading to the north-west.

"Secondly—To cross over to Streaky Bay, send from thence to Port Lincoln for supplies, and then follow the line of coast to the westward, until I met with a tract of country practicable to the north. To the first of these plans were many objections; amongst the principal ones, were, the very unfavourable accounts given both by Captain Sturt, and Major Mitchell, of the country to the west of the Darling River—the fact of Captain Sturt's having found the waters of that river salt during a continued ride of many days—the numerous tribes of natives likely to be met with, and the very small party I should have with me; lastly, the course of the river itself, which trending so much to the eastward, would take us from, rather than towards the centre of this Continent. On the other hand, by crossing to the

westward, I should have to encounter a country which I knew to be all but destitute of water, and to consist, for a very great distance, of barren sandy ridges and low lands, covered by an almost impenetrable scrub, at a season, too, when but little rain could be expected, and the heat would, in all probability, be intense; still, of the two, the latter appeared to me the least objectionable, as we should at least be going towards the point we wished to reach, and through a country as yet quite unknown.

"After mature and anxious consideration, therefore, I decided upon adopting it, hoping that my decision may meet with the approbation of the Committee.

"Previous to our arrival at Mount Arden, we experienced very showery weather for some days, (otherwise we could not have attempted a passage to the westward); and as there were no longer any apprehensions of water being found on the route to Streaky Bay, I sent two of my teams across upon our old tracks, in charge of my overseer, whilst I conducted the third myself, in company with Mr. Scott, direct to Port Lincoln, to procure the supplies we required. In crossing from Mount Arden, towards Port Lincoln, we travelled generally through a low barren country, densely covered by brush, among which were scattered, at considerable intervals, a few small patches of grass, with here and there some rocky elevations; in the latter, we were usually able to procure water for ourselves and horses, until we arrived at the districts already explored, in traversing which we passed (to the N. E. of Port Lincoln) some rich, well watered valleys, bounded by a considerable extent of grassy hills, well adopted for sheep or cattle, arriving at Port Lincoln on the 3rd of October. As a line of route from Adelaide for the emigration of stock, the course we followed, though it cannot be called a good one, is perfectly practicable in the winter season; and I have no doubt, when the country becomes better known, the present track might be considerably improved upon, and both grass and water obtained in greater abundance.

"I regret extremely to acquaint you, that on the morning of the

9th September, one of the police horses (called "Grey Paddy") kindly lent to the Expedition by His Excellency the Governor, was found with his leg broken, apparently from the kick of another horse during the night, and I was obliged to order him to be shot in consequence. With this exception, no serious accident has occurred, and the whole of the party are in the enjoyment of good health and spirits. As the Expedition will still be absent, in all probability, upwards of five months, I have availed myself of a kind offer from Dr. Harvey, to send his boat over to Adelaide, and have sent Mr. Scott to receive any instructions his Excellency the Governor, or the Committee, may wish to give relative to our future proceedings; and immediately Mr. S. returns, I shall hurry up to Streaky Bay with the supplies, and at once move on to the westward, my overseer being now engaged in preparing for our forcing a passage through the scrub, to the north-west of Streaky Bay, as soon as we arrive there with the remainder of the party.

"I have the honour to be, Sir,

"Your obedient servant,

"EDW. JOHN EYRE."

"The Chairman of the Committee for promoting the Northern Expedition."

From the 9th to the 22nd of October, I was occupied a good deal at the camp, having only one man and a native boy to attend to the tent, the horses and the sheep, so that I was in a great measure confined at home, occasionally only making short excursions to the town to superintend the preparation of a large supply of horse-shoes, or visiting the stations of some of the nearest country settlers. I had lately bought a kangaroo dog, from the captain of an American whaler, and in these

rambles had frequent opportunities of trying my new purchase, both after emus and kangaroos, but he was quite useless for hunting either, and did little credit to the honesty of the person who sold him to me, and who had asked and received a high price, in consideration of the animal being, as he assured me, of a better description than ordinary. Of the natives of the district I saw nothing whatever; the death of young Hawson, and the subsequent scouring of the country by police, had driven them away from the occupied parts, and forced them to the fastnesses of the hills, or to the scrubs; I was, however, enabled by the kindness of Mr. Schürman, a German Missionary, stationed at Port Lincoln, to obtain a limited collection of words and phrases in the dialect of the district, and which I hoped might be of some use to me hereafter. Mr. Schürman has since published a copious vocabulary and grammar, of the language in use in this part of Australia.

On the 22nd, upon going into the settlement, I found the Government cutter Waterwitch at anchor in the harbour, having Mr. Scott on board, and a most abundant supply of stores and provisions, liberally sent us by his Excellency the Governor, who had also most kindly placed the cutter at my disposal, to accompany and co-operate with me along the coast to the westward.

Mr. Scott had managed every thing confided to him most admirably; and I felt very greatly in-

debted to him for the ready and enterprising manner in which he had volunteered, to undertake a voyage from Port Lincoln to Adelaide in a small open boat, and the successful manner in which he had accomplished it. Among other commissions, I had requested him to bring me another man to accompany the expedition in the place of the one (R. M'Robert) who had driven the dray to Port Lincoln, and with whom I was going to part; as also to bring for me a native, named Wylie, an aborigine, from King George's Sound, whom I had taken with me to Adelaide on my return in May last, but who had been too ill to accompany me at the time the expedition started; the latter he had not been able to accomplish, as the boy was in the country when he reached Adelaide, and there was not time to get him down before the Waterwitch sailed. The man, however, he had procured, and I was glad to recognize in him an old servant, who had been with me in several of my former expeditions, and who was a most excellent carter and tent servant. His name was Thomas Costelow.

Having received large packets of papers and many letters, both from relations in England, and from many warm-hearted friends in Adelaide, I returned with Mr. Scott and Costelow to the tent, to make immediate preparations for our departure. The delay, occasioned by my having been obliged to send to Adelaide for our supplies, had so greatly protracted the period of my absence from the rest of

my party, beyond what I had anticipated, that I became most anxious to rejoin them: the summer weather too, was rapidly approaching, and I dreaded the task of forcing a way through the low level scrubby waste, around Streaky and Smoky Bays, under a tropical sun.

From the despatches received, I was glad to find that the Governor and the Colonists had approved of the step I had taken, in moving to the westward, which was gratifying and satisfactory, notwithstanding the disappointments I had experienced. In the course of the day, I sent in a dray to Port Lincoln, with our heavy baggage to put on board the cutter, with orders to Mr. Germain the master, to sail immediately for Streaky Bay, and lose no time in communicating with the party there. Before the cutter sailed, I purchased an excellent little boat to be sent with her for use in our coast or inland explorations, should it be found necessary.

October 23.—The blacksmith not having finished all the shoes, I was compelled to remain another day in camp; the man too, who had been left in charge of the sheep had lost them all; whilst the one, therefore, was finishing his work and the other looking for his sheep, I employed myself in writing letters for Adelaide, and in arranging my business in Port Lincoln, &c.

October 24.—Having struck the tent, and loaded the dray, Mr. Scott and I rode into town to breakfast with Dr. Harvey, and take leave of our Port

Lincoln friends. After transacting business matters, I settled with the man who was going to leave me, deducting the price of the sheep which by his carelessness he had lost, and which had not been recovered; I then paid Dr. Harvey for the hire of his boat, &c. and in arranging for it, he generously refused to receive more than £5. as his boat had not been used in the return voyage from Adelaide. He also most kindly supplied us with some few small things, which we yet required, and was altogether most attentive and courteous.

Upon returning to our camp, I moved on the party, delighted once more with the prospect of being actively employed. Whilst I conducted the dray, I sent Mr. Scott round by Mr. Brown's station, to buy eleven more sheep in the place of those M'Robert had lost, and at night he rejoined us with them near Mr. White's station, about ten miles from Port Lincoln; it was late before the sheep came, and the yard to put them in was made, and as there were so few of them, they were a good deal alarmed and would not go into the yard, rushing about violently, breaking away every time we drove them near it; at last we got ten safely housed, and were obliged to put up with the loss of the eleventh, the night being quite dark.

Mr. White and Mr. Poole visited us from their station, and I tried to purchase from the former a noble dog that he possessed, of the mastiff breed, but could not prevail upon him to part with it.

On the 25th I detained the party in camp, that I might get our sheep shorn, and send to Port Lincoln to inquire if there were any more letters for me by Dr. Harvey's little boat, which was expected to arrive to-day. Mr. Scott, who rode into the settlement, returned in the afternoon.

October 26.—Sending the dray on under the guidance of the native boy, I rode with Mr. Scott up to Mr. White's station to wish him good bye, and to make another effort to secure an additional dog or two; finding that he would not sell the noble mastiff I so much wished to have, I bought from him two good kangaroo dogs, at rather a high price, with which I hastened on after the drays, and soon overtook them, but not before my new dogs had secured two fine kangaroos. For the first few miles we crossed a low flat country, which afterwards became undulating and covered with dwarf scrub, after this we passed over barren ridges for about three miles, with quartz lying exposed on the surface and timbered by the bastard gum or forest casuarinæ. We then descended to a level sandy region, clothed with small brush, and having very many salt lakes scattered over its surface; around the hollows in which these waters were collected, and occasionally around basins that were now dry, we found large trees of the gum, together with a few casuarinæ. A very similar kind of low country appeared to extend far to the eastward and north-west.

Kangaroos were very numerous, especially near

those hollows, that were surrounded by gum-trees, to which they retired for shelter during the heat of the day. We encamped at night in the midst of many of these salt lakes, without any water, but the grass was good. Our stage had been 25 miles upon a course of N. 25° W. After watching the horses for a few hours, we tied them up for the night, not daring to trust them loose without water. A few natives had been seen during the day, but they ran away.

A singular feature attending the salt lakes, or the hollows where water had formerly lodged, was the existence of innumerable small stones, resembling biscuits or cakes in shape, perfectly circular and flat, but a little convexed in the upper surface, they were of various sizes, and appeared to consist of lime, being formed into their present shape by the action of water. Very similar ones have since been found in the volcanic region near Mount Gambier, on the southern coast of New Holland. From our present camp were seen before us to the north-west some low green looking ranges, lightly timbered, and promising a better country than we had hitherto met with.

October 27.—Having arrived at the hills, in about three miles, we found them abundantly grassed, but very rugged and rocky, of an oolitic limestone formation, with occasionally a light reddish soil covering the rock in the flats and valleys. Between these ranges and the sea, which was about a mile beyond them, were rather high sand hills,

having a few stunted trees growing upon them, but otherwise destitute of vegetation. No water could be found, nor were there any watercourses from the hills, where we examined them.

Keeping under the east side of the ranges for a few miles, we crossed the main ridge to the westward, and after a stage of about thirteen miles, halted under a high hill, which I named Mount Hope, in my former journey. In a gorge of the range where the granite cropped out among the limestone, we found a spring of beautiful water, and encamped for the day. Mr. Scott and one of the native boys shot several pigeons, which came to the spring to drink in the evening in great numbers. In the meantime I had ascended the hill for a view, and to take angles. At a bearing of W. S. W. I set Point Drummond only a few miles distant from the camp, and between it and a bearing of S. W. was a considerable salt water lagoon on the eastern side of the sand hills of the coast; the surrounding country was low, level and scrubby. To the westward a great extent of dense scrub was visible, amid which were one or two elevations; and a salt lake, at a bearing of S. 60° E. I made the latitude of this camp 34° 7′ 16″ S. and the variation of the compass 4° 10′ E.

October 28.—Travelling onwards for four miles, we passed a fine spring, situated in a swamp to our left, and at two more we came to a sheet of water, named Lake Hamilton,* a large and apparently

* After my friend George Hamilton, Esq

deep lake, with but a few hundred yards of a steep high bank, intervening between it and the sea; the latter was rapidly encroaching upon this barrier, and would probably in the course of a few years more force a way through, and lay under water a considerable extent of low country in that vicinity. Around the margin of the lake was abundance of good grass, but the bank between it and the sea was high and very rocky.

After leaving the lake we entered upon a succession of low grassy hills but most dreadfully stony, and at night encamped upon a swamp, after a stage of about sixteen miles. Here we procured abundance of good water by digging through the limestone crust, near the surface. The country around was still of the same character as before, but amidst the never-ceasing strata of limestone which everywhere protruded, were innumerable large wombat holes—yet strange to say not one of these was tenanted. The whole fraternity of these animals appeared to have been cut off altogether in some unaccountable manner, or to have migrated simultaneously to some other part. No emus or kangaroos were to be seen anywhere, and the whole region around wore a singularly wild and deserted aspect.

October 29.—Our route was again over low stony hills, but with rather better valleys between them; this kind of country appeared to extend from five to twelve miles inland from the coast, and then

commenced the low level waste of barren scrubby land, which we so constantly saw to the eastward of us.

I had intended to make a short stage to-day to a spring, situated in the midst of a swamp, in latitude 33° 46′ 35″ S., but having kept rather too far away from the coast, I missed it, and had to push on for twenty-three miles to a rich and very pretty valley, under a grassy range, lightly wooded with casuarinæ. The soil was somewhat sandy, but clothed with vegetation; in holes in the rocks we procured abundance of water from a little valley near our camp, and in a swamp about a mile and a half north-east was a spring. Our stage was a long one, and the day being excessively hot, our horses, sheep, and dogs were nearly all knocked up. Of the latter two were unfortunately missing when we arrived at our halting ground; one came up afterwards, but the other could nowhere be found, though both had been seen not two miles away. The missing* dog was the best of the two which I had purchased of Mr. White, and I felt sorry for a loss which it would be impossible for me to replace. Many native fires were seen to-day, and especially in the direction of a high bare-looking detached range to the north-east, named by me from its shape, Mount Wedge; none of these people

* Upon returning to Adelaide in 1841, I learnt that the dog had gone back all the way to Mr. White's station, and as Mr. White wished to keep the animal, he returned the money he had received at his sale.

were, however, seen, but a fire still burning was found where we encamped for the night.

On the 30th we remained stationary to rest the horses, and to try and recover the lost dog, but after a long and fruitless search, we were obliged to give up the attempt.

On the 31st, after crossing a ridge under which we were encamped, we passed through a very pretty grassy and park-like country, and what was very unusual, not stony on the surface. There were in places a great many wombat holes, but these were now all occupied by their tenants, and the whole aspect of the country was more encouraging and cheerful; the extent of good country was, however, very limited. Towards the coast was a low scrubby-looking region with salt lakes, and to the east it was bounded by a dense brush, beyond which were extensive plains of a barren and scrubby appearance. In the midst of these plains were large fields of a coarse wiry-kind of grass, growing in enormous tufts, five or six feet high, and indicating the places where swamps exist in wet seasons; these were now quite dry, but we had always found the same coarse-tufted grass growing around the margins of the salt lakes, and in those places also where we had found water. This description of country seemed to extend to the base of Wedge Hill, which I intended to have ascended, but the weather was too cloudy to obtain a view from it. The character of the country to the north and north-east was equally

low and unpromising, with the exception of two peaks seen at considerable distances apart.

Our stage to-day was sixteen miles to Lake Newland,* a large salt-water lake, with numerous fine and strong springs of excellent water, bubbling up almost in the midst of the salt. In one place one of these springs was surrounded by a narrow strip of soil, and the stream emanating from it took its winding course through the skirts of the salt-water lake itself, inclosed by a very narrow bank of earth, on either side; this slight barrier being the only division between the salt and the fresh water. From the abundance of fresh water at Lake Newland, and the many patches of tolerably grassy country around, a very fair station might be formed, either for sheep or cattle.

November 1.—Leaving Lake Newland we passed through a scrubby country, which extended close under the coast hummocks for five miles, and then ascended a high barren range. The view from this was extensive, but only over a mass of low and desolate scrub, with the exception of one or two elevations to the north and north-east. Towards the coast, amidst the waste around, was a large sheet of salt water, with here and there a few openings near it, studded with casuarinæ, to this we bent our steps, and at twelve miles from our last night's camp took up our position in lat. 33° 14′ 36″ S.

* Named after my friend R. F. Newland, Esq.

upon the lagoon seen by Flinders from the mast-head.

The traces of natives and their beaten pathways were here very numerous (of the latter of which there could not be less than thirty) all leading to a large deep hole, sunk about eight feet, principally through a soft limestone rock. This was carefully blocked up with large stones and mud, but upon clearing it out the water came bubbling up rapidly, and we got an abundant supply. The entrance from seawards to the sheet of water, or lagoon, is between two heads, (one of them being a high bluff) little more than a mile apart. There appeared to be a reef off the entrance outside, but our being without a boat prevented us from ascertaining how far this inlet was adapted for a harbour. Inside, the water is shallow towards the south, but deeper in the northern half of the inlet.

November 2.—Tracing round the shores, we passed several other holes dug by the natives in the sand, to procure water; these, however, did not appear of so permanent a character as the first, for many had fallen in, and others contained but very little water. The huts of the natives were numerous, and of a large and substantial description; but we saw none of their owners.

After leaving the inlet we pushed on through the scrub to a high bluff of granitic formation, distant about sixteen miles N. 35° W., and named by me

Mount Hall.* The road being very heavy, it was late when we arrived there, and both our horses and sheep were much fatigued. We got a little water from holes in the sheets of granite, and had very good grass in an opening under the hill.

From the summit of Mount Hall the view was extensive, and I obtained many angles. The surrounding country was low, level, and barren, and densely covered with scrub, among which, to the north-west were seen many salt-water lakes. At intervals a few elevations were seen amidst this low waste, apparently similar to the hill we were upon, among them were one or two very distant at a little N. of E., and nearer, one at E. 16° N.; the latter I named Mount Cooper.† At a bearing of S. 35° W. another salt-water inlet was seen apparently communicating with the sea; but this we could not satisfactorily ascertain from its great distance. The latitude of Mount Hall, deduced from observations of à Lyræ and à Aquilæ, was 33° 2′ 40″ S. Several native fires were seen to the east and south-east in the scrub.

November 3.—After seeing the party ready to move on, I left Mr. Scott to conduct the dray, whilst I rode forward in advance to the depôt near Streaky Bay, where I arrived early in the afternoon, and was delighted to find the party all well, and everything going on prosperously. They had expected me some

* After G. Hall, Esq. the Governor's Private Secretary.

† After Charles Cooper, Esq. the Judge of the colony.

time before and were looking out very anxiously for my arrival. The Waterwitch had arrived on the 29th of October, but the master did not communicate with my party before the 31st; so that until the last three days they had been quite ignorant of our movements, and uneasy at our so greatly exceeding the time originally fixed for rejoining them. Having sent back a man, and two fresh and strong horses to assist the dray, I reconnoitred once more our depôt of 1839. Situated in the middle of some extensive grassy openings among the scrub, is a solid sheet of limestone of a very hard texture: in the centre of this rock is a small oblong opening, a foot deep and only just large enough to admit of a pint pot being dipped in it. This curious little hole contained water from five to seven inches in depth, the level of which was maintained as rapidly as a person could bale it out; this was our sole supply for ourselves and horses, but it was a never-failing one.*

The spring is situated in latitude 32° 49′ 0″ S. and about three miles south-east from the most southerly bight of Streaky Bay. About one mile

* The water had not a pleasant flavour, as it was of a chalybeate nature; but in a country where water was scarce, it was invaluable. When I was here in 1839, it had even then this disagreeable taste, but now it was much worse, in consequence, probably, of the contaminating substance being washed off more abundantly than formerly from the rocks enclosing the reservoir by the rapid flow of water necessary to replace the large consumption of my party.

and a half to the west is another small hole of better flavoured water, but not so abundant in its supply.

I found all the horses in excellent condition, and one, a very fine mare of my own, had foaled about six weeks before. Around the camp were immense piles of oyster shells, pretty plainly indicating the feasting my men had enjoyed during my absence, whilst their strong and healthy appearance shewed how well such fare had agreed with them. The oysters were procured from the most southerly bight of Streaky Bay, on some mud banks about two or three hundred yards below low water mark, where they are found in immense numbers and of different sizes. The flavour of these oysters was excellent, and the smaller ones were of great delicacy. The men were in the habit of taking a cart down to the beach frequently, where, by wading up to their knees in the sea at low water, they were enabled to fill it. This supply lasted for two or three days.

Many drays might easily be loaded, one after the other, from these oyster beds. The natives of the district do not appear to eat them, for I never could find a single shell at any of their encampments. It is difficult to account for the taste or prejudice of the native, which guides him in his selection or rejection of particular kinds of food. What is eaten readily by the natives in one part of Australia is left untouched by them in another, thus the oyster is eaten at Sydney, and I believe King George's Sound, but not at Streaky Bay. The unio or fresh-

water muscle is eaten in great numbers by all the natives of New South Wales and South Australia; but Captain Grey found that a Perth native, who accompanied him on one of his expeditions, would not touch this kind of food even when almost starving. Snakes are eaten by some tribes, but not by others; and so with many other kinds of food which they make use of.

About three o'clock, Mr. Scott arrived with the dray, after a long and harassing stage of twenty miles over a low, stony, and scrubby tract of country, between Mount Hall and Streaky Bay, and which extended beyond our track to the coast hummocks to the west. These latter appeared somewhat high, and under them we had seen many salt-water lakes from the summit of Mount Hall.

My party were now once more all assembled together, after having been separated for nearly seven weeks; during which, neither division knew what had befallen the other, and both were necessarily anxious to be reunited again, since, in the event of any mischance occurring to either, the other would have been placed in circumstances of much difficulty, if not of danger; and the whole object of the undertaking would have been frustrated.

The great delay caused by my having been obliged to send over from Port Lincoln to Adelaide for supplies, had thrown us very late in the season; the summer was rapidly advancing, the weather even now, being frequently intensely hot, whilst the grass

was gradually drying up and losing its nourishment. Our sending to Adelaide had, however, obtained for us the valuable services of the Waterwitch to assist us in tracing round the desert line of coast to the north-west, and had enabled us to procure a larger and more varied supply of stores, than we could possibly have brought up from Port Lincoln in a single dray. We were now amply furnished with conveniences of every kind; and both men and horses were in good plight and ready to enter upon the task before them.

CHAPTER X.

COUNTRY BETWEEN STREAKY BAY AND BAXTER'S RANGE —ITS SCRUBBY CHARACTER—GAWLER RANGE—MOUNT STURT — ASCEND A PEAK — SALT LAKES — BEAUTIFUL FLOWER—ASCEND ANOTHER HILL—MOUNT BROWN SEEN —EXTENSIVE VIEW TO THE NORTH—LAKE GILLES— BAXTER'S RANGE.

During the time that I had been occupied in conducting my division of the party from Baxter's Range to Port Lincoln, the overseer had been engaged in guiding the other portion across to Streaky Bay, upon my former track from thence to Mount Arden, in September 1839. The following brief extracts from my Journal of that period, whilst crossing from Streaky Bay to Mount Arden, will convey an idea of the character of the country extending between these two points; and of the great difficulty, indeed almost the impossibility of forcing a passage, except immediately after the occurrence of heavy rains.

1839, *Sept.* 18.—We left the depôt near Streaky Bay, at a course nearly due east, and passing through alternations of brush and of open grassy plains, upon the skirts of which grew a few casuarinæ; halted after a stage of eighteen miles, at an opening in the brush, where we had good grass, but no water; we

were consequently obliged to watch the horses during the night, to prevent their straying. From this camp Mount Hall bore S. 2° E. and Mount Cooper S. E. the variation of the compass being 2° 22′ E.

September 19.—Travelling east through the same kind of country for fifteen miles, we halted upon a high scrubby ridge; having a few grassy openings at intervals, and with large sheets of granite exposed in some parts of its surface. In the holes among these rocks we procured a supply of water that had been deposited by the late rains; but which a few warm days would have dried up. The latitude of the water was 32° 48′ S. and from it Mount Hall bore S. 38° W., Mount Cooper S. 15° W. Before us to the north-east were visible many peaks of a range, with a high and broken outline, which I named the Gawler range, after His Excellency Colonel Gawler, the Governor of South Australia. One very high peak in this range I named Mount Sturt, after my friend Captain Sturt; it bore from our present camp E. 10° N. and had been previously seen from the summit of Mount Hall.

September 20.—Our route to-day was through a perfect desert, very scrubby and stony, with much prickly grass growing upon the sand ridges, which alternated with the hard limestone flats; there were very few clear intervals of country upon our whole course; and for the last five miles the heavy sand and dense scrub made it very difficult to get on at

all. After a long stage of twenty-five miles nearly due east, we halted at a high ridge similar to that upon which we encamped last night, with sheets of granite exposed on its surface, and rain water lodged in the hollows. The horses were all completely knocked up with the severe labour of this day's stage; I ascertained the latitude of the camp to be 32° 47′ 40″ S. and the variation of the compass which increased as we advanced to the eastward, was now 4° 12′ E. The Gawler range was now distinctly visible, extending from N. 15° W. to N. 65° E. and presenting the broken and picturesque outline of a vast mountain mass rising abruptly out of the low scrubby country around. The principal elevations in this extensive range, could not be less than two thousand feet; and they appeared to increase in height as the range trended to the north-west. To the eastward the ranges decreased somewhat in elevation, but were still very lofty.

September 21.—We had another long stage to-day of twenty miles, over, if possible, a worse road than yesterday, no intermission whatever of the heavy steep sandy ridges and dense eucalyptus scrub; the horses were dreadfully jaded, and we were obliged to relieve them by yoking up all the riding horses that would draw. Even with this aid we did not get the journey over until an hour and a half after dark. During the day our course had been more to the northward of east, and brought us close under the Gawler range. At fourteen miles after starting,

we passed a salt lake on our right, and several salt ponds on our left; but we could find no permanent fresh water anywhere. In the rocks of the range we had encamped under, we procured a small quantity left by the rains, but this supply was rapidly disappearing under the rays of a very hot sun, and had we been a few days later, we could not have crossed at all. The latitude of our camp was 32° 4′ 40″ S.

September 22.—This morning I ascended one of the heights in the Gawler range, from which the view is extensive to the southward, over a generally low level country, with occasional elevations at intervals; to the north the view is obstructed by the Gawler range, consisting apparently of a succession of detached ridges high and rocky, and entirely of a porphoritic granite lying in huge bare masses upon the surface. The hills* were without either timber or shrubs, and very barren, with their front slopes exceedingly steep, and covered by small loose stones; several salt lakes were seen in various directions, but no indications of fresh water or springs.

It was late before the party moved on to-day, but

* Peron's description of the mountains on the South-western coast, is singularly applicable to the Gawler range—He says, Tom. III. p. 233. "Sur ces montagnes pelées on ne voit pas un arbre, pas un arbriseau, pas un arbuste; rien, en un môt, qui puisse faire soupçonner l'existence de queque terre végétale. La dureté du roc paroît braver ici tous les efforts de la nature, et résister à ces mêmes moyens de décomposition qu' elle emploie ailleurs avec tant de succès."

the road was somewhat better, and there were many intervals of open grassy plains under the hills along which we travelled, at a course of E. 17° N. for twenty-five miles. Encamping at night with tolerable grass, but without water. There had been a considerable pool of rain water here a few days ago, but it was now nearly dried up by the sun, and I was obliged to order the horses to be watched during the night.

To-day I found a most splendid creeping plant in flower, growing in between the ranges, it was quite new to me, and very beautiful; the leaf was like that of the vetch but larger, the flower bright scarlet, with a rich purple centre, shaped like a half globe with the convex side outwards; it was winged, and something like a sweet pea in shape, the flowers hung pendent upon long slender stalks, very similar to those of sweet peas, and in the greatest profusion; altogether it was one of the prettiest and richest looking flowers I have seen in Australia.

September 23.—Moving on over a firm road, but with much scrub and prickly grass, we travelled for fifteen miles under the hills at a course of E. 20° N., encamping early in the afternoon close under them, and procuring a little water left in the hollows by the rains. I ascended another of the heights in the Gawler range to-day, but could obtain no clear view from it, the weather being hazy. Ridge behind ridge still appeared to rise to the north, beyond the front one under which we were travelling; and

several salt lakes were seen among the hills at intervals. The rock of which the hills were composed was now changed from a porphoritic granite to a reddish quartz, which was scattered all over the front hills in loose small fragments. The latitude of our camp was 32° 30′ 35″ S.

September 24.—Our road was firmer to-day, over a red gritty soil of sandy loam and gravel. The hills were still covered with quartz, but decreasing perceptibly in elevation as we advanced to the east. At about eight miles we were lucky enough to find a puddle of rain water, and at once halted for the day to rest and refresh the horses. Having ascended a high peak near the camp, I found I was surrounded by a mass of hills on every side; they gradually increased in elevation as they stretched to the north-west, becoming lower at a bearing of north, and quite detached to the north-east; resembling so many islands in the level waste around them.

September 25.—Moving from our camp early we had an excellent road, and travelled rapidly for about twenty miles, nearly due east, halting for the night under a high red hill, where we found some rain water for our horses; but the grass was very scarce. After dinner I ascended the hill near the camp and obtained a distant view of Mount Brown, and the range on the east side of Spencer's Gulf. To the north was one vast sea of level scrub, and in the midst of it a lake; but seemingly of no very great size. A few elevations were seen to the south-east,

of all of which I took bearings, and then descended to the camp again. The bearing of Mount Brown, from this hill, was E. 10° S.; and the latitude of the camp, under the hill, was 30° 27′ 55″ S.

September 26.—Passing up a barren valley between low hills, we had at first a good road, but afterwards it became very stony. We encamped early, after a short stage of fifteen miles, having gradually left most of the hills to the north of us. One that we were encamped under I ascended, and had a very extensive view, and took many angles. A large lake (named Lake Gilles*) bore nearly due south, and was the same that had been seen from Baxter's range; the latter was now distinctly visible at a bearing of E. 20° S. The latitude of our camp was 32° 35′ 58″ S. There was barely enough rain water found to supply our horses, but the feed was tolerably good.

September 27.—We had a very bad stony road to-day, consisting principally of quartz and iron-stone, of which the ranges had latterly been entirely composed. Our stage was sixteen miles, passing round the south end of Baxter's range, and encamping under it, on the eastern front, upon a gorge, in which was plenty of water and good grass. We had thus, by taking advantage of the rains that had fallen, been enabled to force a passage from Streaky Bay to Spencer's Gulf; but we had done so with

* After the first Colonial Treasurer of the province.

much difficulty, and had we been but a few days later, we should have failed altogether, for though travelling for a great part of the distance under very high rocky ranges, we never found a drop of permanent fresh-water nor a single spring near them. There are no watercourses, and no timber; all is barren rocky and naked in the extreme. The waters that collected after rains, lodged in the basins of small lakes; but such was the nature of the soil that these were invariably salt.

It was through this dreary region I had left my overseer to take his division of the party when we separated at Baxter's range; but I confided the task to him with confidence. Rain had at that time fallen very abundantly; he had already been over the road with me before, and knew all the places where water or grass was likely to be found; and our former dray tracks of 1839, which were still distinctly visible, would be a sufficient guide to prevent his getting off the line of route. The skill, judgment, and success with which the overseer conducted the task assigned to him, fully justified the confidence I reposed in him; and upon my rejoining the party at Streaky Bay, after an absence of seven weeks, I was much gratified to find that neither the men, animals, or equipment, were in the least degree the worse for their passage through the desert.

CHAPTER XI.

EMBARK STORES—PARTY LEAVE STREAKY BAY—DENSE SCRUB —POINT BROWN—SINGULAR WELL—PROCESS OF CHANGE IN APPEARANCE OF COUNTRY—DIG FOR WATER—FRIENDLY NATIVES — EXTRAORDINARY RITE — NATIVE GUIDES— LEIPOA'S NEST—DENIAL BAY—BEELIMAH GAIPPE — KANGAROO KILLED — MORE NATIVES—BERINYANA GAIPPE— SALT LAKES — WADEMAR GAIPPE — SANDY AND SCRUBBY COUNTRY — MOBEELA GAIPPE — DIFFICULTY OF GETTING WATER—MORE NATIVES—GENUINE HOSPITALITY—SINGULAR MARKS ON THE ABDOMEN — NATIVES LEAVE THE PARTY—FOWLER'S BAY—EXCELLENT WHALING STATION.

November 4.—To-day the party were occupied in sorting and packing stores, which I intended to send on board the Waterwitch to Fowler's Bay, that by lightening the loads upon the drays, we might the more easily force a passage through the dense scrub which I knew we had to pass before we reached that point. In the afternoon the men were engaged in shearing the remainder of our sheep, washing their own clothes and preparing everything for breaking up the camp, whilst I rode down to Streaky Bay, and went on board the cutter to give orders relative to the reception of our stores to-morrow.

The harbour of Streaky Bay is extensive, but generally open to the westward. In its most south-

erly bight, however, is a secure well sheltered bay, for vessels of moderate draught of water; being protected by a long sandy shoal which must be rounded before a vessel can enter.*

November 5.—To-day we were engaged in carting down the stores and a supply of water to the cutter, which we got safely on board, when I gave written instructions to the master to sail at once, and land a cask of water, a little higher up the bay, for the use of the horses. In the evening the drays were loaded and all got ready for our departure to-morrow.

November 6.—Having had the horses watched last night we were enabled to move away early, and about noon arrived at the place I had appointed Mr. Germain to land the cask of water: it was all ready, and we watered the horses, took luncheon and moved on again, directing Mr. Germain to proceed to Smoky Bay, and land water for us again there. The country we passed through to-day was low, level, and sandy, and covered with prickly grass, with a few tea-tree swamps, but no fresh water. The shore of Streaky Bay on its western side was bounded by high steep sandy hummocks, behind which we travelled, and at night halted on the borders of a dense scrub, nearly opposite the middle of the bay, after a stage of about

* A plan of this harbour was made by Mr. Cannan, one of the Government assistant surveyors of South Australia, when sent by the Government in a cutter to meet my party with provisions in 1839.

eighteen miles. Our vicinity to the sea enabled Mr. Scott, myself, and the native boys to enjoy a swim, a luxury highly appreciated by a traveller after a day's hard work, amidst heat and dust, and one which I anticipated we should frequently obtain in our course to the westward.

November 7.—Breakfasted before daylight, and moved on with the earliest dawn to encounter a scrub which I knew to be of heavier timber, and growing more closely together than any we had yet attempted. It consisted of Eucalyptus dumosa and the salt-water tea-tree, (the latter of a very large growth and very dense,) in a heavy sandy soil.

By keeping the axes constantly at work in advance of the drays, we succeeded in slowly forcing a passage through this dreadful country, emerging in about seventeen miles at an open plain behind Point Brown, and in the midst of which was a well of water. The entrance to this well was by a circular opening, through a solid sheet of limestone, about fifteen inches in diameter, but enlarging a little about a foot below the surface. The water was at a depth of ten feet, and so choked up with sand and dirt that we were obliged to clear the hole out effectually before we could get any for the horses. This was both a difficult and an unpleasant occupation, as the man engaged in it had to lower himself through the very narrow aperture at the top and work in a very cramped position amongst the dirt and wet below, with the mud dripping upon him;

it was drawn up in a bag, for a bucket could not be used in so contracted a space. As a spade could not be employed a large shell left by the natives was used for scooping up the dirt, which made the operation both slow and tiresome. Our horses were dreadfully fagged and very thirsty after the severe toil they had endured in dragging the drays through so heavy a scrub, but with all our exertions we could only obtain from the spring about two buckets of water apiece for them. As this was not nearly enough to satisfy them, I was obliged to have them watched for the night to prevent their straying. The men had been kept incessantly at work from five in the morning until nearly ten at night, and the additional duty of watching the horses bore very hard upon them; but they knew it to be necessary, and did it cheerfully.

We had passed during our route through one or two of the small grassy openings so constantly met with even in the densest scrubs, and, as usual, I noticed upon these plains the remains of former scrub, where the trees were apparently of a larger growth than those now existing around. The soil too, from a loose sand, had become firmer and more united, and wherever the scrub had disappeared its place had been supplied by grass. This strongly confirmed my opinion, long ago formed, that those vast level wastes in Australia, now covered with low scrub, (and formerly, I imagine, the bed of the ocean,) are gradually undergoing a process of

amelioration which may one day fit them for the purposes of pasture or agriculture. The smoke of many native fires was seen during the day behind and around us, but we did not fall in with any of the natives.

November 8.—Having given each of the horses a bucket of water from the well, we moved on again through the same dense scrub we had encountered yesterday, but, if possible, more harassing, from the increased steepness of the sandy ridges and the quantity of dead timber lying on the surface, and causing a great impediment to our progress. We forced our way through this worse than desert region, for about fourteen miles, and arrived early in the afternoon, with our horses quite exhausted, upon the shores of Smoky Bay, at a point where the natives had dug a hole in the sand hills near the beach to procure water, and from which the south end of the island of St. Peter bore W. 15° S.

The Waterwitch was already here, and supplied us with a cask of water, until the men had dined and rested a little, before entering upon the task of digging for water, which proved to be a most arduous undertaking, and occupied us all the afternoon. We had to sink through a loose sand for fifteen feet, which from its nature, added to the effect of a strong wind that was blowing at the time, drifted in almost as fast as it was thrown out. We were consequently obliged to make a very large opening before we could get at the water at all; it was then very

abundant, but dreadfully salt, being little better than the sea water itself; the horses and sheep however drank it greedily, as we had been able to give them but little of that received from the vessel.

November 9.—Upon mustering the horses this morning I found they were looking so exhausted and jaded after the hard toil they had gone through in the last three days, that I could not venture to put them to work again to-day. I was consequently obliged to remain in camp, to rest both them and the men, all of whom were much fatigued. The well in the sand was even salter to-day than we had found it yesterday, and was quite unserviceable; the men had sunk the hole rather too deep, that they might get the water in greater abundance; but when the tide rose it flowed in under the sand and spoiled the whole. As the water, even at the best, had been so salt that we could not use it ourselves, and as it was far from being wholesome for the horses, I did not think it worth while to give the men the fatigue of digging another hole. I therefore put both horses and men upon a limited allowance, and got a cask containing sixty gallons from the cutter for our day's supply. I also took the opportunity of again lightening our loads by sending on board some more of the baggage and the light cart. This, by decreasing the number of our teams, would, I thought, enable me to change the horses occasionally in the others, and give me an extra man to assist in clearing a road through the scrub.

Having completed my arrangements, I sent on the Waterwitch to the north-east part of Denial Bay, to land water there, as I did not expect to get any until our arrival at Point Peter. Mr. Scott accompanied the cutter, having expressed a wish to take a trip in her for a few days.

During the forenoon we were visited by a party of natives, who came to get water at the hole in the sand. They were not much alarmed, and soon became very friendly, remaining near us all night; from them I learned that there was no water inland, and none along the coast for two days' journey, after which we should come to plenty, at a place called by them "Bēelĭmăh Gāip-pĕ." Their language was nearly the same as that of Port Lincoln, intermixed with a few words in use at King George's Sound; and I now regretted greatly that I had not the Western Australian native with me.

I found a most singular custom prevailing among the natives of this part of the country, which I had never found to exist anywhere else (except at Port Lincoln), and the origin of which it would be most difficult to account for. In various parts of Australia some of the tribes practise the rite of circumcision, whilst others do not; but in the Port Lincoln peninsula, and along the coast to the westward, the natives not only are circumcised, but have in addition another most extraordinary ceremonial.*

* Finditus usque ad urethram à parte inferâ penis.

Among the party of natives at the camp I examined many, and all had been operated upon. The ceremony with them seemed to have taken place between the ages of twelve and fourteen years, for several of the boys of that age had recently undergone the operation, the wounds being still fresh and inflamed. This extraordinary and inexplicable custom must have a great tendency to prevent the rapid increase of the population; and its adoption may perhaps be a wise ordination of Providence, for that purpose, in a country of so desert and arid a character as that which these people occupy.

November 10.—Getting the party away about five o'clock this morning, I persuaded one of the natives, named "Wilguldy," an intelligent cheerful old man, to accompany us as a guide, and as an inducement, had him mounted on a horse, to the great admiration and envy of his fellows, all of whom followed us on foot, keeping up in a line with the dray through the scrub, and procuring their food as they went along, which consisted of snakes, lizards, guanas, bandicoots, rats, wallabies, &c. &c. and it was surprising to see the apparent ease with which, in merely walking across the country, they each procured an abundant supply for the day.

In one place in the scrub we came to a large circular mound of sand, about two feet high, and several yards in circumference; this they immediately began to explore, carefully throwing away the sand

with their hands from the centre, until they had worked down to a deep narrow hole, round the sides of which, and embedded in the sand, were four fine large eggs of a delicate pink colour, and fully the size of a goose egg. I had often seen these hills before, but did not know that they were nests, and that they contained so valuable a prize to a traveller in the desert. The eggs were presented to me by the natives, and when cooked were of a very rich and delicate flavour. The nest was that of a wild pheasant, (Leipoa), a bird of the size of a hen pheasant of England, and greatly resembling it in appearance and plumage; these birds are very cautious and shy, and run rapidly through the underwood, rarely flying unless when closely pursued. The shell of the egg is thin and fragile, and the young are hatched entirely by the heat of the sun, scratching their way out as soon as they are born, at which time they are able to shift for themselves.*

Our road to-day was through a heavy sandy country, covered for the most part densely with the eucalyptus and tea-tree. About eleven we struck the south-east corner of Denial Bay, and proceeded on to the north-east, where I had appointed the cutter to meet me. To my surprise she was not to be seen anywhere, and I began to get anxious about our supply of water for the horses, as we were entirely dependant upon her for it. In the afternoon I observed the

* For a further account of the Leipoa, vide chapter iii. of Notes on the Aborigines.

vessel rounding into the south-east bight of the bay, and was obliged to send my overseer on horseback a long ride round the bay, to tell the master to send us water to the place of our encampment. He had been to the island of St. Peter yesterday looking for birds' eggs, and having neglected to take advantage of a fair wind, was not now able to get the cutter up to us. The water had consequently to be brought in the boat a distance of eight miles through a heavy sea, and at considerable risk. Mr. Scott, who came with the master in the boat, returned on board again in the evening. Our stage to-day had been eighteen miles, and the horses were both tired and thirsty. The small supply of water brought us in the boat being insufficient for them, we again were obliged to watch them at night.

November 11.—Guided by our friend "Wilguldy," we cut off all the corners and bends of the coast, and steering straight for "Bēclĭmah Gāippĕ," arrived there about noon, after a stage of twelve miles; the road was harder and more open, but still in places we had to pass through a very dense brush. The water to which the native took us was procured by digging about four feet deep, in a swamp behind the coast hummocks, which were here high and bare, and composed of white sand. The water was abundant and good, and the grass tolerable, so that I determined to remain a day to rest and recruit the horses; it was so rarely that we had the opportunity of procuring both grass and

water. The dogs killed a kangaroo, which enabled us to give our guide an abundant feast of food, to which he had been accustomed; but to do the old man justice, I must say he was not very scrupulous about his diet, for he ate readily of any thing that we offered him.

After we had encamped some more natives came up and joined us from the vicinity of Point Peter, which lay a few miles to the east of us; they were known to those who had accompanied us, and were very friendly and well conducted. To many inquiries about water inland, they all assured me that there was none to be found in that direction; but said that there was water further along the coast called "Bĕrĭnyănă gāippĕ," and only one day's journey from our present encampment.

November 12.—I sent the overseer this morning to communicate with the cutter, and to request the master to fill up as much water as he could, preparatory to our moving onwards to Fowler's Bay. In the evening the overseer returned, accompanied by Mr. Scott, to acquaint me that the water near Point Peter was a considerable distance from the vessel; and that it would be impracticable to fill up all the casks, with no other means than they had at command.

I took the sun's altitude, at noon, for latitude; but the day was windy, and the mercury shook so much that I could not depend upon the observation within three or four miles. It gave nearly 32° 10″ S. which

I thought too much to the northward. The sun set by compass W. 24½° S.

November 13.—Guided by the natives, we moved onward through a densely scrubby country, and were again obliged to keep the men with axes constantly at work, in advance of the drays to clear the road. Our progress was necessarily slow, and the work very harassing to the horses; fortunately the stage was not a very long one, and in fourteen miles we reached "Bĕrĭnyăna gāippe," a small hole dug by the natives, amongst the sand hummocks of the coast, a little north of Point Bell. By enlarging this a little, we procured water in great abundance and of excellent quality. Our course had been generally west by south; and from our camp, the eastern extreme of Point Bell, bore S. 28° W., and the centre of the "Purdies Islands" E. 49° S.

November 14.—Upon moving on this morning, we were obliged to keep more to the north to avoid some salt lakes and low swamps near the coast. The natives still accompanied us through a very sandy and scrubby country to a watering place among some sand hills, which they called "Wădĕmăr gāippĕ." Here we encamped early, after a stage of ten miles, and were enabled to procure abundance of good water, at a depth of about four feet below the surface.

There was a large sheet of salt water near our camp which seemed to be an inlet of the sea, and after a hasty dinner I walked down to examine it.

The water generally appeared shallow, but in some places it was very deep; after tracing it for five miles, and going round one end of it, I found no junction with the sea, though the fragments of shells and other marine remains, clearly shewed that there must have been a junction at no very remote period. The sand hummocks between the lake and the sea being very high, I ascended them to take bearings, and then returning to the lake halted, with the black boy who had accompanied me, to bathe, and rest ourselves. The weather was most intensely hot, and our walk had been long and fatiguing, amongst sand hills under a noonday sun. We fully appreciated the luxury of a swim, and especially as we were lucky enough to find a hole of fresh water on the edge of the lake, to slake our parching thirst. Ducks, teal, and pigeons were numerous, and the recent traces of natives apparent everywhere. It was after sunset when we returned, tired and weary, to our camp.

November 15.—In the morning we started as early as possible to get the stage over before the great heat of the day came on, still accompanied and guided by the friendly natives, who took us through the best and most open line of country. At six miles we entered a very dense scrub, leaving to the north of us, several patches of open plains; to the north-east were seen the smokes of several fires. The natives had told us that there was water out in that direction, at a short day's journey; but, as they did not wish us to go to it, I inferred that they

thought there was not enough to satisfy our party, having now frequently seen how great was the supply we required at each encampment: I was myself of the opinion that a hole probably existed to the north-east similar to the one we had found in the plains behind Point Brown, where the access is difficult, and the quantity procurable at any one time not very great. The scrub we had traversed to-day was principally of salt-water tea-tree, growing upon a succession of steep sandy ridges, which presented a formidable barrier to the progress of the drays; the distance to be accomplished was not above fourteen miles; but so difficult was the nature of the country, and so oppressive the heat, that, notwithstanding our very early start, it was four o'clock in the afternoon before we arrived at the place of destination, which was called by the natives, "Mobēelă găippĕ." The horses and men were greatly fatigued, but for the latter, the labours of the day were far from being over, for, upon arriving at the place where the water was to be procured, I found that the holes, sunk by the natives, were through ridges of a loose sand to a depth of fourteen or fifteen feet, at the bottom of which, water was obtained in very small quantities. There were several of these holes still open, and the traces of many others in every direction around, which had either fallen in or been filled up by the drifting of the sand. These singular wells, although sunk through a loose sand to a depth of fourteen or fifteen feet, were only about two feet in

diameter at the bore, quite circular, carried straight down, and the work beautifully executed. To get at the water, the natives placed a long pole against one side of the well, ascending and descending by it to avoid friction against the sides, which would have inevitably sent the sand tumbling in upon them. We, however, who were so much clumsier in all our movements, could not make use of the same expedient, nor indeed, would the size of the wells, made by the natives, have enabled us even with their assistance, to get out a moderate supply for the horses. It became necessary, therefore, to open a new well, of much larger dimensions, a task of no easy kind in so loose a sand.

Having put the overseer and men to their arduous employment, I ascended the highest of the sand hills, and took a set of angles, among which Point Fowler bore W. 16° S. and Point Bell, E. 40° S.

A small lake was visible at W. 40° N. The country still looked very cheerless in every direction, and no signs of improvement appeared to relieve the dreary scene around, or to lead me to hope for better country beyond.

Upon rejoining the well diggers, I found after great exertions they had thrown out an immense quantity of sand, and made a large and commodious well, and were just going to commence watering the horses; at this juncture and before a single bucket of water could be taken out, the sand slipped, and the sides of the well tumbled in, nearly burying

alive the man who was at the bottom. The labour of two hours was lost, and tired as they were, the men had to begin their work afresh. It was eight at night before the well was cleared out again sufficiently to enable us to water the horses, for almost as fast as the sand was thrown out other sand fell in; by nine the whole of them had received two buckets of water each, when the sides of the well again shot in, and we were obliged to give up our digging operations altogether, as the men were completely exhausted; to relieve them Mr. Scott and I watched the horses during the night.

November 16.—Intending to remain in camp today, I set the men to clear out the well once more. It was a tedious and laborious task, in consequence of the banks of sand falling in so repeatedly, and frustrating all their efforts, but at last by sinking a large cask bored full of auger holes we contrived about one o'clock, to get all the horses and sheep watered; in the evening, however, the whole again fell in, and we gave up, in despair, the hopeless attempt to procure any further supply of water, under such discouraging circumstances.

For some days past, we had been travelling through a country in which the Mesembryanthemum grows in the greatest abundance, it was in full fruit, and constituted a favourite and important article of food among the native population; all our party partook of it freely, and found it both a wholesome and an agreeable addition to their fare; when ripe,

the fruit is rich, juicy, and sweet, of about the size of a gooseberry. In hot weather it is most grateful and refreshing. I had often tasted this fruit before, but never until now liked it; in fact, I never in any other part of Australia, saw it growing in such abundance, or in so great perfection, as along the western coast. During our stay in camp a native had been sent out to call some of the other natives, and towards evening a good many came up, and were all regularly introduced to us by 'Wilguldy' and the others, who had been with us so long; I gave them a feast of rice which they appeared to enjoy greatly. Our more immediate friends and guides had learnt to drink tea, and eat meat and damper, with which we supplied them liberally, in return for the valuable services they rendered us.

November 17.—Moving on early, we were guided by the natives for about twelve miles, round the head of Fowler's Bay, crossing through a very sandy, scrubby, and hilly country, and encamping at a water hole, dug between the sandy ridges, about two o'clock in the day. I had ridden a little in advance of the party, and arriving at the water first, surprised some women and children encamped there, and very busily engaged in roasting snakes and lizards over a fire. They were much afraid and ran away on seeing me, leaving their food upon the embers, this our friendly guides unceremoniously seized upon and devoured, as soon as they came up with the drays. These few women were the first

we had seen for some time, as the men appeared to keep them studiously out of our way, and it struck me that this might be in consequence of the conduct of the whalers or sealers with whom they might have come in contact on the coast. Old Wilguldy, however, appeared to be less scrupulous on this point, and frequently made very significant offers on the subject.

Soon after we had encamped several natives came up and joined those with us. They were exceedingly polite and orderly—indeed the best conducted, most obliging natives I ever met with—never troubling or importuning for any thing, and not crowding around in that unmannerly disagreeable manner, which savages frequently adopt—nor did I ever find any of them guilty of theft; on the contrary, several times when we had left some article behind, they called to us, and pointed it out. To them we were indebted for the facilities we had enjoyed in obtaining water; for without their guidance, we could never have removed from any encampment without previously ascertaining where the next water could be procured; and to have done this would have caused us great delay, and much additional toil. By having them with us we were enabled to move with confidence and celerity; and in following their guidance we knew that we were taking that line of route which was the shortest, and the best practicable under the circumstances. Upon arriving at any of the watering places to which they

had conducted us, they always pointed out the water, and gave it up to us entirely, no longer looking upon it as their own, and literally not taking a drink from it themselves when thirsty, without first asking permission from us. Surely this true politeness—this genuine hospitality of the untutored savage, may well put to the blush, for their exclusiveness and illiberality, his more civilised brethren. In how strong a light does such simple kindness of the inhabitant of the wilds to Europeans travelling through his country (when his fears are not excited or his prejudices violated,) stand contrasted with the treatment he experiences from them when they occupy his country, and dispossess him of his all.

There were now a considerable number of natives with us, all of whom had been subjected to the singular ceremony before described. Those we had recently met with, had, in addition, a curious brand, or mark on the stomach, extending above and below the navel, and produced by the application of fire. I had previously noticed a similar mark in use among one or two tribes high up on the Murray River, (South Australia,) and which is there called "Renditch." At the latter place, however, the brand was on the breast, here it was on the stomach. I have never been able to account in any way for the origin or meaning of this mark; but it is doubtless used as a feature of distinction, or else why should it only be found in one or two tribes and so far apart, had it been accidental or arisen from lying

near or upon the fires in cold weather, every individual of certain tribes would not have been affected, and some individuals of every tribe would: now, the first, as far as my experience enabled me to judge, is the case; but the latter most assuredly is not. Both at the Murray, and near Fowler's Bay, the natives always told me, that the marks were made by fire, though how, or for what purpose, I could never learn at either place.

November 18.—Our horses being all knocked up, and many of them having their shoulders severely galled by the racking motion of the drays winding up and down the heavy sandy ridges, or in and out of the dense scrubs, I determined to remain for some time in depôt to recover them, whilst I reconnoitred the country to the west, as far as the head of the great Australian Bight. To leave my party in the best position I could, I sent the overseer round Point Fowler to see if there was any better place for the horses in that direction, and to communicate with the master of the Waterwitch on the subject of landing our stores. Upon the overseer's return, he reported that there was fresh water under Point Fowler, but very little grass; that he had not been able to communicate with the cutter, the wind being unfavourable and violent, and the cutter's boat on board, but they had noticed him, and shewn their colours; he said, moreover, that the vessel was lying in a very exposed situation, and did not appear at all protected by Point Fowler, which, as she was not

well found in ground-tackle, might possibly occasion her being driven ashore, if a gale came on from the south-east. This news was by no means satisfactory, and I became anxious to get our things all landed that the cutter might go to a place of greater safety.

November 19.—The wind still being unfavourable, the day was spent in removing the drays, tents, &c. to a more elevated situation. Our camp had been on the low ground, near the water, in the midst of many scrubby hills, all of which commanded our position. There were now a great many well armed natives around us, and though they were very kind and friendly, I did not like the idea of their occupying the acclivities immediately above us—at all events, not during my contemplated absence from the party. I therefore had every thing removed to the hill next above them, and was a good deal amused at the result of this manœuvre, for they seemed equally as uneasy as we had been at the heights above them being occupied. In a very short time they also broke up camp, and took possession of the next hill beyond us. This defeated the object I had in view in our former removal, and I now determined not to be out-manœuvred any more, but take up our position on the highest hill we could find. This was a very scrubby one, but by a vigorous application of the axes for an hour or two, we completely cleared its summit; and then taking up the drays, tent, baggage,

&c. we occupied the best and most commanding station in the neighbourhood. The result of this movement was, that during the day the natives all left, and went in the direction of where the cutter was. I was not sorry for their departure; for although they had been very friendly and useful to us, yet now that I contemplated keeping the party for a long time in camp, and should myself probably be a considerable time absent, I was more satisfied at the idea of the natives being away, than otherwise; not that I thought there was the least danger to be apprehended from them if they were properly treated; but the time of my men would be much occupied in attending to the horses and sheep; and they were too few in number, to admit of much of that time being taken up in watching the camp or the natives who might be near it; for I always deemed it necessary, as a mere matter of prudence, to keep a strict look out when any natives were near us, however friendly they might profess to be.

Upon walking round the shores of Fowler's Bay, I found them literally strewed in all directions with the bones and carcases of whales, which had been taken here by the American ship I saw at Port Lincoln, and had been washed on shore by the waves. To judge from the great number of these remains, of which very many were easily recognisable as being those of distinct animals, the American must have had a most fortunate and successful season.

It has often surprised me, that the English having so many colonies and settlements on the shores of Australia, should never think it worth their while to send whalers to fish off its coasts, where the whales are in such great numbers, and where the bays and harbours are so numerous and convenient, for carrying on this lucrative employment. I believe scarcely a single vessel fishes any where off these coasts, which are entirely monopolised by the French and Americans, who come in great numbers; there cannot, I think, be less than three hundred foreign vessels annually whaling off the coasts, and in the seas contiguous to our possessions in the Southern Ocean. I have generally met with a great many French and American vessels in the few ports or bays that I have occasionally been at on the southern coast of Australia; and I have no doubt that they all reap a rich harvest.

Among the many relics strewed around Fowler's Bay, I found the shell of a very large turtle laying on the beach; it had been taken by the crew of the vessel that I met at Port Lincoln, and could not have weighed less than three to four hundred weight. I was not previously aware that turtle was ever found so far to the southward, and had never seen the least trace of them before.

CHAPTER XII.

LAND THE STORES AND SEND THE CUTTER TO DENIAL BAY —PARTY REMOVE TO POINT FOWLER—LEAVE THE PARTY —BEDS OF LAKES—DENSE SCRUB—COAST SAND DRIFTS— FRUITLESS SEARCH FOR WATER — DISTRESS OF THE HORSES—TURN BACK—LEAVE A HORSE—FIND WATER— REJOIN PARTY — SEND FOR THE HORSE — COUNTRY AROUND DEPOT—TAKE A DRAY TO THE WESTWARD— WRETCHED COUNTRY—FALL IN WITH NATIVES—MISUNDERSTAND THEIR SIGNS—THEY LEAVE US—VAIN SEARCH FOR WATER — TURN BACK — HORSE KNOCKED UP — GO BACK FOR WATER—REJOIN THE DRAY—COMMENCE RETURN — SEARCH FOR WATER — DRAY SURROUNDED BY NATIVES—EMBARRASSING SITUATION—BURY BAGGAGE— THREE HORSES ABANDONED—REACH THE SAND DRIFTS —UNSUCCESSFUL ATTEMPTS TO SAVE THE HORSES — SEND FOR FRESH HORSES—SEARCH FOR WATER TO N. E. — RECOVER THE DRAY AND STORES—REJOIN THE PARTY AT DEPOT NEAR POINT FOWLER — RETURN OF THE CUTTER.

November 20.—The wind being favourable for the boats landing to-day, I sent the overseer with pack-horses to the west side of Fowler's Bay, to bring up some flour and other stores for the use of the party; at the same time I wrote to the master of the cutter, to know whether he considered his anchorage, at Fowler's Bay, perfectly safe. His reply was, that the anchorage was good and secure if

he had been provided with a proper cable; but that as he was not, he could not depend upon the vessel being safe, should a heavy swell set in from the south-east. Upon this report, I decided upon landing all the stores from the cutter; and sending her to lay at a secure place on the west side of Denial Bay, until I returned from exploring the country, near the head of the Great Bight. On the 22nd, I gave orders to this effect, at the same time directing the captain to return to Fowler's Bay by the 11th December, at which time I hoped to have accomplished the journey I contemplated.

On the same day I gave my overseer instructions for his guidance during my absence; and after sending the drays on to the water behind Point Fowler, that they might be nearer to the vessel, I set off on horseback to the westward, accompanied by a native; and taking with us a pack-horse to carry provisions. Crossing for about six miles through scrub, at a west by south course, we entered open grassy plains, among which were many beds of small dried up salt lakes. This description of country continued for about six miles, when we again entered a very dense scrub, and continued in it for eight miles, until we struck the coast. Not finding any indications of water or grass, I pushed up along the beach for three miles further, and was then obliged to encamp without either, as it had become too dark to proceed.

November 23.—Moving along the coast for ten

miles, we came to large high drifts of pure white sand, from which some red-winged cockatoos and pigeons flew out, and near which were several native encampments. I now fully hoped to find water; but after a long and anxious examination, was obliged to give up the search. I knew that our only hope of finding water lay in these drifts of sand; but as it was frequently very difficult to find, and never could be procured without digging, (sometimes to a great depth,) I began to fear that our attempt to reach the head of the Bight was almost hopeless. We had no means of digging in the sand to any depth; whilst, from the constant drift, caused by the winds among these bare hills, it was exceedingly disagreeable to remain even for a short time to examine them. The wind was blowing strong, and whirlwinds of sand were circling around us, with a violence which we could scarcely struggle against, and during which we could hardly venture either to open our eyes, or to draw our breath.

Leaving the sand-drifts we travelled behind the coast ridge through a more open but still sandy country, making a long stage to some more high bare sand-drifts, amidst which we again made a long but unsuccessful search for water; at night we encamped near them, and our unfortunate horses were again obliged to be tied up for the second time without either grass or water.

November 24. — Finding that there was little

prospect of procuring water a-head, and that our horses were scarcely able to move at all, I felt it necessary to retrace our steps as speedily as possible, to try to save the lives of the animals we had with us. In order that we might effect this and be encumbered by no unnecessary articles, I concealed, and left among some bushes, all our baggage, pack-saddles, &c. After passing about five miles beyond the sand-drifts where I had seen the cockatoos and pigeons, one of the horses became completely exhausted and could not proceed any further; I was necessitated therefore to tie him to a bush and push on with the other two to save them.

When I left my party on the 22nd, I had directed them to remove to some water-holes behind Point Fowler, but, as I had not seen this place myself, I was obliged to steer in the dark in some measure at random, not knowing exactly where they were. The greatest part of our route being through a dense brush, we received many scratches and bruises from the boughs as we led our horses along, to say nothing of the danger we were constantly in of having our eyes put out by branches we could not see, and which frequently brought us to a stand still by painful blows across the face. At last we arrived at the open plains I had crossed on my outward track, and following them down came to two deep holes in the limestone rock, similar to the one behind Point Brown. By descending into these holes we found a little water, and were enabled to

give each of the horses three pints; we then pushed on again, hoping to reach the camp, but getting entangled among the scrub, were obliged at midnight to halt until daylight appeared, being almost as much exhausted as the horses, and quite as much in want of water, for we had not tasted the little that had been procured from the hole found in the plains.

November 25.—At the first streak of daylight we moved on, and in one mile and a half reached the camp near Point Fowler, before any of the party were up. We had guessed our course well in the dark last night, and could not have gone more direct had it been daylight. Having called up the party and made them get a hasty breakfast, I hurried off a dray loaded with water, and accompanied by the overseer, one man, and the black boy, to follow up our tracks to where the tired horse had been tied. During my absence I found that every thing but the cart had been landed from the cutter, and safely brought up to the camp, and that as soon as that was on shore she would be ready to go and lie at anchor at Denial Bay.

About noon I was greatly surprised and vexed to see my overseer return driving the loose horses before him. It seemed that whilst feeding around the camp they had observed the dray and other horses going away and had followed upon the tracks, so that the overseer had no alternative but to drive them back to the camp. This was very unfortunate,

as it would occasion great delay in reaching the one we had left tied in the scrub. I directed the overseer to hurry back as rapidly as possible, and by travelling all night to endeavour to make up for lost time, for I greatly feared that if not relieved before another day passed away, it would be quite impossible to save the animal alive.

After resting myself a little I walked about to reconnoitre the neighbourhood of our camp, not having seen it before. The situation was at the west side of the upper extreme of Point Fowler, immediately behind the sand-drifts of the coast, which there were high, bare, and of white sand. The water was on the inland side, immediately under the sand-hills, and procured in the greatest abundance and of good quality, by sinking from one to three feet. It was found in a bed of white pipe-clay. To the north-west of us were some open grassy plains, among which our horses and sheep obtained their food, whilst here and there were scattered a few salt swamps or beds of lakes, generally, however, dry. The whole country was of fossil formation, and the borders of the lakes and swamps exhibited indurated masses of marine shells, apparently but a very recent deposit. Further inland the country was crusted on the surface with an oolitic limestone, and for the most part covered by brush; a few open plains being interspersed here and there among the scrubs, as is generally the case in that description of country.

The natives still appeared to be in our neighbourhood, but none had been near us since they first left on the 19th. I would now gladly have got one of them to accompany me to look for water, but none could be found. On the 26th and 27th I was occupied in getting up the cart, some casks, &c. from the cutter, and preparing for another attempt to round the head of the Great Bight. The vessel then sailed for Denial Bay, where she could lie in greater safety, until I required her again.

Early on the 27th the man and black boy returned with the dray from the westward, they had found the horse very weak and much exhausted, but by care and attention he was got a little round, and the overseer had remained to bring him slowly on: he had been four entire days and nights without food or water, and for the first two days and a half of this time had been severely worked. In the evening the overseer came up, driving the jaded animal, somewhat recovered indeed—but miserably reduced in condition.

The party with the dray had taken spades with them to dig for water at the sand hills, where I had seen the pigeons and cockatoos on the 23rd, and at ten feet they had been lucky enough to procure abundance, which although of a brackish quality was usable; from the great depth, however, at which it was obtained, and the precarious nature of the soil, it was very troublesome to get at it.

November 28.—This morning I sent away a dray

with three horses, carrying seventy gallons of water to assist me in again endeavouring to get round the Bight. As the road was very scrubby, and much impeded by fallen timber, I had previously sent on a man to clear it a little; and about ten o'clock I followed with the native boy. We got tolerably well through the scrub, and encamped in a plain about sixteen miles from the depôt, where there was good grass. The weather being cool and showery, our horses would not drink more than a bucket each from the casks.

November 29.—Having moved on the dray early over rather a heavy road, we took up our quarters under the white sand-drifts, after a stage of nine miles. I then left the boy in charge of the camp, and proceeded myself with the two men, and provided with spades and buckets, to where the overseer had obtained water by digging; the place was about two miles from our camp, between the sand-drifts and the sea, and immediately behind the front ridges of the coast. By enlarging the hole, and sinking a tub bored full of holes, we managed to water the horses, and get a supply for ourselves. In the afternoon an attempt was made to dig a well nearer the camp, but a stratum of rock put an end to our labours.

November 30.—Sending back one of the men to the depôt, I left the native boy to guide the dray, whilst I diverged towards the coast to look for water among the sand-drifts, that were seen occa-

sionally in that direction; in none of them, however, could I obtain a drop. The country travelled over consisted of very heavy sand ridges, covered for the most part with low scrub, and as the stage was a long one (twenty-two miles), I found upon overtaking the dray that the horses were knocked up, and a party of fourteen natives surrounding it, who were making vehement gesticulations to the man not to proceed, and he being only accompanied by a single black boy was greatly alarmed, and did not know what to do; indeed, had I not arrived opportunely, I have no doubt that he would have turned the horses round, and driven back again. Upon coming up with the natives, I saw at once that none of them had been with us before, but at the same time they appeared friendly and well-behaved, making signs for us not to proceed, and pointing to some sand-drifts at the coast which we had passed, implying, as I understood them, that there was water there. We were now in an opening among the scrub, consisting of small grassy undulating plains, and at these I determined to halt for the night, hoping the natives would remain near us, and guide us to water to-morrow. To induce them to do this, after giving the horses each two buckets of water, I gave two gallons among them also, besides some bread. They at once took possession of an elevation a little above our position, and formed their camp for the night. As we were so few in number compared to the natives, we were

obliged to keep a watch upon them during the whole night, and they did the same upon us—but at a much less individual inconvenience from their number; they appeared to take the duty in turn—two always being upon guard at once.

December 1.—After giving the natives some water, and taking breakfast ourselves, we moved on in the direction they wished us to go, followed by the whole party; at two miles they brought us to the sea over a dreadful heavy road, but upon then asking them where the water was, they now told us to our horror, that there was "mūkkă gāip-pĕ," or, no water. The truth was now evident, we had mutually misunderstood one another; they seeing strangers suddenly appear, had taken it for granted they came from the sea, and pointed there, whilst we, intent only upon procuring water, had fancied they had told us we should find it where they pointed; upon reaching the coast both were disappointed—they at not seeing a ship, and we at not finding water.

It was now a difficult matter to decide what to do: our horses were greatly jaded, owing to the hilly and sandy character of the country; our water was reduced to a low ebb in the casks, for relying upon the natives guiding us to more, we had used it improvidently; whilst the very least distance we could be away from the water, at the sand-drifts, was twenty-five miles; if we went back we lost all our previous labour, and could not do so without leaving the dray behind, and if we went forward, it was

very problematical whether water could be procured within any distance attainable by our tired horses.

The natives now asserted there was water to the north-west, but that it was a long way off. As they still seemed willing to accompany us, I determined to proceed, and pushed on parallel with the coast behind the front ridges; at nine miles the horses were quite exhausted, and could get no further, so that I was obliged to halt for the night, where a few tufts of withered grass were found under the hummocks.

Our sable friends had gradually dropped off, one or two at a time, until only three remained. These I endeavoured to make friends with, by giving them plenty of water and bread, and after taking a hasty meal, I got them to go with me and the native boy along the coast, to search for water. After going about a mile, they would proceed no further, making signs that they should be very thirsty, and enabling me clearly to comprehend, that there was no water until the head of the Great Bight was rounded. As I did not know exactly, what the actual distance might be, I still hoped I should be able to reach it, and leaving the natives to return, I and the boy pushed on beyond all the sandy hills and cliffs, to the low sandy tract bordering upon the head of the Bight, from which we were about twelve miles distant. The day was hazy, or the cliffs of the Great Bight would have been distinctly visible.

We lost a good deal of time in tracking the foot-

steps of a party of native women and children, among some bare sand-drifts, hoping the track would lead to water; but the party seemed to have been rambling about without any fixed object, and all our efforts to find water were in vain; the whole surface of the country, (except where it was hidden by the sand-drifts) was one sheet of limestone crust, and wherever we attempted to dig among the sand-drifts, the rock invariably stopped us.

As it was getting on towards evening, I returned to where I had left the dray, and giving each of the horses one bucket of water and five pints of oats, was obliged to have them tied for the night, myself and the man being too much fatigued to watch them.

December 2.—We had not moved far upon our return, when one of our most valuable dray-horses became completely overdone with fatigue, and I was obliged to take it out of the team and put in a riding horse, to try, if possible, to reach the plains where the grass was. We just got to the borders of this open patch of country, when the poor animal (a mare) could not be got a yard farther, and we were compelled to halt and decide upon what was best to be done. The water in the cask was nearly all consumed, the mare could not stir, and the other horses were very weak, so that no time was to be lost; I immediately decided upon leaving the man to take care of the mare and the dray, whilst I and the native boy took the other horses back for more

water; having measured out to the man, water amounting to a quart per day, during our contemplated absence, I gave all that was left, consisting of about half a bucket full, to the mare, and then accompanied by the boy, pushed steadily back towards the water at the sand hills, distant about twenty-five miles. At dark we arrived there, but the sand had fallen in, and we had to labour hard to clear out the hole again; it was eleven o'clock at night before we could get the horses watered, and we then had to take them a mile and a half before we could get any grass for them. Returning from this duty, we had to collect and carry on our backs for more than a mile, a few bundles of sticks and bushes, to make a little fire for ourselves, near the water, the night being intensely cold. It was past two o'clock in the morning before we could lay down, and then, tired and harassed as we were, it was too cold and damp for us to rest.

December 3.—The scorching rays of the morning sun awoke us early, weary and unrefreshed, we had no trees to shade us, and were obliged to get up. After looking at the well, and congratulating ourselves upon its not having fallen in, we set off to look for the horses, they had wandered away in search of food, causing us a long and tiresome walk over the sand-hills in the sun, before we could find them; having at last got them and driven them to where the water was, we were chagrined to find that during our absence the well had again fallen in,

and we had the labour of clearing it out to go through again.

The day was excessively oppressive, with a hot parching wind, and both we and the horses drank incessantly. Towards night we took the horses away to the grass, and remained near them ourselves for the sake of the firewood, which was there more abundant.

We had thunder towards evening, and a few dops of rain fell, but not sufficient to moderate the temperature, the heat continuing as oppressive as before.

December 4.—After watering the horses, we took ten gallons upon a pack-horse, and proceeded on our return to the man we had left; the state in which our own horses were, having made it absolutely necessary to give them the day's rest they had yesterday enjoyed. We arrived about five in the afternoon, at the little plain where we had left the man; he was anxiously looking out for us, having just finished his last quart of water. The poor mare looked very weak and wretched, but after giving her at intervals, eight gallons of water, she fed a little, and I fully hoped we should succeed in saving her life. No natives had been seen during our absence.

The night set in very dark and lowering, and I expected a heavy fall of rain; to catch which we spread our oilskins and tarpaulin, and placed out the buckets and pannekins, or whatever else would

hold water: a few drops, however, only fell, and the storm passed away, leaving us as much under a feeling of disappointment, as we had been previously of hope: one little shower would have relieved us at once from all our difficulties.

December 5. — Upon getting up early, I thought the horses looked so much refreshed, that we might attempt to take back the dray, and had some of the strongest of them yoked up. We proceeded well for two miles and a half to our encampment of the 30th November; and as there was then a well defined track, I left the man to proceed alone, whilst I myself went once more to the coast to make a last effort to procure water among some of the sand-drifts. In this I was unsuccessful. There were not the slightest indications of water existing any where. In returning to rejoin the dray, I struck into our outward track, about three miles below, where I had left it, and was surprised to find that the dray had not yet passed, though I had been three hours absent. Hastily riding up the track, I found the man not half a mile from where I had left him, and surrounded by natives. They had come up shortly after my departure; and the man, getting alarmed, was not able to manage his team properly, but by harassing them had quite knocked up all the horses; the sun was getting hot, and I saw at once it would be useless to try and take the dray any further.

Having turned out the horses to rest a little, I went to the natives to try to find out, if possible,

where they procured water, but in vain. They insisted that there was none near us, and pointed in the direction of the head of the Bight to the north-west, and of the sand hills to the south-east, as being the only places where it could be procured; when I considered, however, that I had seen these same natives on the 30th November, and that I found them within half a mile of the same place, five days afterwards, I could not help thinking that there must be water not very far away. It is true, the natives require but little water generally, but they cannot do without it altogether. If there was a small hole any where near us, why they should refuse to point it out, I could not imagine. I had never before found the least unwillingness on their part to give us information of this kind; but on the contrary, they were ever anxious and ready to conduct us to the waters that they were acquainted with. I could only conclude, therefore, that what they stated was true—that there was no water near us, and that they had probably come out upon a hunting excursion, and carried their own supplies with them in skins, occasionally, perhaps, renewing this from the small quantities found in the hollows of the gum scrub, and which is deposited there by the rains, or procuring a drink, as they required it, from the long lateral roots of the same tree.* I have myself seen water obtained in both these ways. The principal inducement to the natives to frequent the small

* Vide Chapter XVI., towards the close.

plains where we were encamped, appeared to be, to get the fruit of the Mesembryanthemum, which grew there in immense quantities, and was now just ripe; whilst the scrub, by which these plains were surrounded, seemed to be alive with wallabie, adding variety to abundance in the article of food.

We were now on the horns of a very serious dilemma: our horses were completely fagged out, and could take the dray no further. We were surrounded by natives, and could not leave it, and the things upon it, whilst they were present (for many of these things we could not afford to lose); and on the other hand, we were twenty-two miles from any water, and our horses were suffering so much from the want of it, that unless we got them there shortly, we could not hope to save the lives of any one of them.

Had the natives been away, we could have buried the baggage, and left the dray; but as it was, we had only to wait patiently, hoping they would soon depart. Such, however, was not their intention; there they sat coolly and calmly, facing and watching us, as if determined to sit us out. It was most provoking to see the careless indifference with which they did this, sheltering themselves under the shade of a few shrubs, or lounging about the slopes near us, to gather the berries of the Mesembryanthemum. I was vexed and irritated beyond measure, as hour after hour passed away, and our unconscious tormentors still remained. Every moment, as it flew, lessened

the chance of saving the lives of our horses; and yet I could not bring myself to abandon so many things that we could not do without, and which we could not in any way replace. What made the circumstances, too, so much worse, was, that we had last night given to our horses every drop of water, except the small quantity put apart for our breakfasts.

We had now none, and were suffering greatly from the heat, and from thirst, the day being calm and clear, and intolerably hot. When we had first unyoked the horses, I made the man and native boy lay down in the shade, to sleep, whilst I attended to the animals, and kept an eye on the natives. About noon I called them up again, and we all made our dinner off a little bread, and some of the fruit that grew around us, the moisture of which alone enabled us to eat at all, our mouths were so thoroughly dry and parched.

A movement was now observed among the natives; and gathering up their spears, they all went off. Having placed the native boy upon an eminence to watch them, the man and I at once set to work to carry our baggage to the top of a sand-hill, that it might be buried at some distance from the dray. We had hardly commenced our labours, however, before the boy called out that the natives were returning, and in a little time they all occupied their former position; either they had only gone as a ruse to see what we intended to do, or they had been noticing us, and had seen us removing our baggage, or else

they had observed the boy watching them, and wished to disappoint him. Whatever the inducement was, there they were again, and we had as little prospect of being able to accomplish our object as ever. If any thing could have palliated aggressive measures towards the aborigines, it would surely be such circumstances as we were now in; our own safety, and the lives of our horses, depended entirely upon our getting rid of them. Yet with the full power to compel them (for we were all armed), I could not admit the necessity of the case as any excuse for our acting offensively towards those who had been friendly to us, and who knew not the embarrassment and danger which their presence caused us.

Strongly as our patience had been exercised in the morning, it was still more severely tested in the afternoon—for eight long hours had those natives sat opposite to us watching. From eight in the morning until four in the afternoon, we had been doomed to disappointment. About this time, however, a general movement again took place; once more they collected their spears, shouldered their wallets, and moved off rapidly and steadily towards the south-east. It was evident they had many miles to go to their encampment, and I now knew we should be troubled with them no more. Leaving the boy to keep guard again upon the hill, the man and I dug a large hole, and buried all our provisions, harness, pack-saddles, water-casks, &c. leaving the dray

alone exposed in the plains. After smoothing the surface of the ground, we made a large fire over the place where the things were concealed, and no trace remained of the earth having been disturbed.

We had now no time to lose, and moving away slowly, drove the horses before us towards the water. The delay, however, had been fatal; the strength of the poor animals was too far exhausted, and before we had gone seven miles, one of them could not proceed, and we were obliged to leave him; at three miles further two more were unable to go on, and they, too, were abandoned, though within twelve miles of the water. We had still two left, just able to crawl along, and these, by dint of great perseverance and care, we at last got to the water about four o'clock in the morning of the 6th. They were completely exhausted, and it was quite impossible they could go back the same day, to take water to those we had left behind. The man, myself, and the boy were in but little better plight; the anxiety we had gone through, the great heat of the weather, and the harassing task of travelling over the heavy sandy hills, covered with scrub, in the dark, and driving jaded animals before us, added to the want of water we were suffering under, had made us exceedingly weak, and rendered us almost incapable of further exertion. In the evening I sent the man, who had been resting all day, to try and bring the two horses nearest to us a few miles on the road,

whilst I was to meet him with water in the morning. Native fires were seen to the north-east of us at night, but the people did not seem to have been at the water at the sand-hills for their supply, no traces of their having recently visited it being found.

December 7.—After giving the horses water we put ten gallons upon one of them, and hurried off to the animals we had left. The state of those with us necessarily made our progress slow, and it was four o'clock before we arrived at the place where they were, about eleven miles from the water. The man had gone on to the furthest of the three, and had brought them all nearly together; upon joining him we received the melancholy intelligence, that our best draught mare had just breathed her last—another lay rolling on the ground in agony—and the third appeared but little better. After moistening their mouths with water, we made gruel for them with flour and water, and gave it to them warm: this they drank readily, and appeared much revived by it, so that I fully hoped we should save both of them. After a little time we gave each about four gallons of water, and fed them with all the bread we had. We then let them rest and crop the withered grass until nine o'clock, hoping, that in the cool of the evening, we should succeed in getting them to the water, now so few miles away. At first moving on, both horses travelled very well for two miles, but at the end of the third, one of them was unable to go any further, and I left the

man to remain, and bring him on again when rested; the other I took on myself to within six miles of the water, when he, too, became worn out, and I had to leave him, and go for a fresh supply of water.

About four in the morning of the 8th, I arrived with the boy at the water, just as day was breaking, and quite exhausted. We managed to water the two horses with us, but were too tired either to make a fire or get anything to eat ourselves; and lay down for an hour or two on the sand. At six we got up, watered the horses again, and had breakfast; after which, I filled the kegs and proceeded once more with ten gallons of water to the unfortunate animals we had left behind. The black boy was too tired to accompany me, and I left him to enjoy his rest, after giving him my rifle for his protection, in the event of natives coming during my absence.

Upon arriving at the place where I had left the horse, I found him in a sad condition, but still alive. The other, left further away, in charge of the man, had also been brought up to the same place, but died just as I got up to him; there was but one left now out of the three, and to save him, all our care and attention were directed. By making gruel, and giving it to him constantly, we got him round a little, and moved him on to a grassy plain, about a mile further; here we gave him a hearty drink of water, and left him to feed and rest for several hours.

Towards evening we again moved on slowly, and as he appeared to travel well, I left the man to bring him on quietly for the last five miles, whilst I took back to the water the two noble animals that had gone through so much and such severe toil in the attempt made to save the others. In the evening I reached the camp near the water, and found the native boy quite safe and recruited. For the first time for many nights, I had the prospect of an undisturbed rest; but about the middle of the night I was awoke by the return of the man with the woful news, that the last of the three horses was also dead, after travelling to within four miles of the water. All our efforts, all our exertions had been in vain; the dreadful nature of the country, and our unlucky meeting with the natives, had defeated the incessant toil and anxiety of seven days' unremitting endeavours to save them; and the expedition had sustained a loss of three of its best horses, an injury as severe as it was irreparable.

December 9.—At day-break, this morning, I sent off the man to the depôt at Fowler's Bay, with orders to the overseer to send five fresh horses, two men, and a supply of provisions; requesting Mr. Scott to accompany them, for the purpose of taking back the two tired horses we still had with us at the sand-hills. Upon the man's departure, we took the two horses to water, and brought up ten gallons to the camp, where the grass was; after which, whilst the horses were feeding and resting, we tried to pass away the day in the same manner; the heat, how-

ever, was too great, and the troubles and anxieties of the last few days had created such an irritation of mind that I could not rest: my slumbers were broken and unrefreshing; but the boy managed better, he had no unpleasant anticipations for the future, and already had forgotten the annoyance of the past.

December 10.—After an early breakfast, we took the horses to water and cleared the hole out thoroughly, as I expected five more horses in the evening. Upon returning to the plain, fires of the natives were again seen to the north-east; but they did not approach us. Our provisions were now quite exhausted, and having already lived for many days upon a very low diet, we looked out anxiously for the expected relay. About four o'clock, Mr. Scott, two men, and five horses arrived, bringing us supplies; so that no time had been lost after the arrival of my messenger. The hole having been previously enlarged and cleared out, no difficulty was experienced in watering the horses, and about sunset all encamped together under the sand-hills at the grassy plain.

December 11.—Leaving directions with Mr. Scott to take back to the depôt, to-morrow, the two horses we had been working so severely, and which were now recruiting a little; and giving orders to the two men to follow the dray track to the north-west to-morrow, with the three fresh horses; I once more set off with the native boy to revisit the scene of our

late disasters; and recover the dray and other things we had abandoned. We passed by the three dead horses on our route, now lying stiff and cold; in our situation a melancholy spectacle, and which awakened gloomy and cheerless anticipations for the future, by reminding us of the crippled state of our resources, and of the dreadful character of the inhospitable region we had to penetrate. At dark we came to the little plain where the dray was, and found both it and our baggage undisturbed; nor was it apparent that any natives had visited the place since we left it. During the evening a few slight showers fell, which, with a heavy dew, moistened the withered grass, and enabled our horses to feed tolerably well.

December 12.—I had proceeded a day in advance of the men and horses coming to recover the dray, in order that I might satisfy myself whether there was water or not near the plains to the east or north-east, as there were some grounds for supposing that such might be the case, from the fact of so many natives having been twice seen there, and the probability that they had remained for five days in the neighbourhood. To-day I devoted to a thorough examination of the country around; and, accompanied by the boy, proceeded early away to the north-east, returning southerly, and then crossing back westerly to the camp. We travelled over a great extent of ground, consisting principally of very dense scrub, with here and there occasional grassy openings; but no where could we observe the slightest indications of the

existence of water, although the traces of natives were numerous and recent; and we tracked them for several miles, often seeing places where they had broken down the shrubs to get a grub, which is generally found there, out of the root; and observing the fragments of the long lateral roots of the gum-scrub, which they had dug up to get water from. And this, I am inclined to think, is what they depend upon principally in these arid regions for the little water they require. The general direction taken by these wanderers of the desert, was to the north-east. About four o'clock the men with the dray-horses arrived, bringing ten gallons of water, which we divided among the horses, and then took it in turn to watch them during the night.

December 13.—Having buried a few things that I might require when I should come out here again, (for I determined not to give up the attempt to round the Great Bight,) I had all the rest of our luggage taken up, and the horses being harnessed, we returned with the dray to the water at the sand-hills, arriving there early in the afternoon. We had yoked up three strong fresh horses, that had done no work for some time previously; and yet, such was the nature of the country, that with an almost empty dray, they had hardly been able to reach the water, at the furthest only twenty-two miles distant, and in accomplishing this, they had been upwards of ten hours in the collar. How then could we expect to get through such a region with drays heavily

loaded, as ours must be, when we moved on finally.

On the 14th we remained in camp to refresh the horses, and early on the following day proceeded through the scrub, on our return to the depôt; first burying our pack-saddle, and a few other things, in the plain near the sand-hills. Notwithstanding the care we had taken of the horses, and the little work we had given them, they got fagged in going through the scrub, and I was obliged to halt the dray at the rocky well in the plains, five miles short of the depôt. I myself went on with the boy to the camp at Point Fowler, where I found the party feasting upon emus, four of which they had shot during my absence.

December 16.—About ten to-day the dray and men arrived safely at the depôt, being the last detachment of the party engaged in this most unfortunate expedition, which had occupied so much time and caused such severe and fatal loss, independently of its not accomplishing the object for which it was undertaken. In the evening I sent Mr. Scott to see if the cutter had returned, and upon his coming back he reported that she had just arrived, but that he had not been able to communicate with her.

CHAPTER XIII.

FUTURE PLANS—REDUCE THE NUMBER OF THE PARTY—SEND THE CUTTER TO ADELAIDE — REPORT TO THE GOVERNOR—MONOTONOUS LIFE AT CAMP—REMOVE TO ANOTHER LOCALITY—GEOLOGICAL CHARACTER OF THE COUNTRY—FLINT FOUND — AGAIN ATTEMPT TO REACH THE HEAD OF THE BIGHT—REACH THE SAND HILLS, AND BURY FLOUR — FRIENDLY NATIVES—EXHAUSTED STATE OF THE HORSES—GET THE DRAY TO THE PLAIN—BURY WATER—SEND BACK DRAY—PROCEED WITH PACK-HORSE —OPPRESSIVE HEAT—SEND BACK PACK-HORSE—REACH THE HEAD OF THE BIGHT—SURPRISE SOME NATIVES—THEIR KIND BEHAVIOUR—YEER-KUMBAN KAUEE—THEIR ACCOUNT OF THE INTERIOR.

December 17.—HAVING now maturely considered the serious position I was in, the difficult nature of the country, the reduced condition and diminished number of my horses, and the very unfavourable season of the year, I decided upon taking advantage of a considerate clause in the Governor's letter, authorizing me "to send back the Waterwitch to Adelaide for assistance, if required."

From the experience I had already had, and from the knowledge I had thus acquired of the character of the country to the westward and to the north, it was evident that I could never hope to take my whole party, small as it was, with me in either

direction. I had already lost three horses in an attempt to get round the head of the Bight, and I had also found that my three best horses now remaining, when strong and fresh after a long period of rest at the depôt, had with difficulty been able to move along with an empty dray in the heavy sandy country to the north-west; how could I expect, then, to take drays when loaded with provisions and other stores? Hitherto we had enjoyed the assistance of the cutter in passing up the coast—by putting all our heavy baggage on board of her, the drays were comparatively empty, and we had got on tolerably well. We could no longer, however, avail ourselves of this valuable aid, for we were now past all harbours. Fowler's Bay being the last place of refuge where a vessel could take shelter for many hundred miles, whilst the fearful nature of the coast and the strong current setting into the Bight, made it very dangerous for a vessel to approach the land at all. Upon leaving Fowler's Bay, therefore, it was evident that we must be dependent entirely upon our own resources; and it became necessary for me to weigh well and maturely how I might best arrange my plans so as to meet the necessity of the case. It appeared to me that if I sent two of my men back to Adelaide in the Waterwitch, a single dray would carry every necessary for the reduced party remaining, and that by obtaining a supply of oats and bran for the horses, and giving them a long rest, they might so far recover strength and spirits

as to afford me reasonable grounds of hope that we might succeed in forcing a passage through the country to the westward, bad as it evidently was. Acting upon the opinion I had arrived at, I sent for the master of the cutter and requested him to get ready at once for sea, and then communicated my decision to the two men who were to leave us, Corporal Coles, R. S. and M. and John Houston, requesting them to get ready to embark to-morrow. They did not appear to experience much surprise, and were I think on the whole rather pleased than otherwise at the prospect of a return to Adelaide. Both these men had conducted themselves remarkably well during the whole time they were in the party, and one of them, John Houston, had been with me in my late disastrous expedition, during which his obedience and good conduct had been beyond all praise. We had, however, now been absent for six months, had traversed a great extent of country, and undergone many hardships; the country we had met with had unfortunately always been of the most barren and disheartening character, and that which was yet before us appeared to be if possible still worse, so that I could not wonder that my men should appear gratified in the prospect of a termination to their labours. With so little to cheer and encourage, they might well perhaps doubt of our final success.

December 18.—Having once decided upon my plans, I lost no time in putting them in execution.

A dray, three sets of horses' harness, and some other things were sent on board the Waterwitch, together with half a sheep and sixty pounds of biscuit for the crew, who were now running short of provisions. Several casks were brought on shore for us to bury stores in, and the boat I had purchased at Port Lincoln was left, at Mr. Scott's request, for him to fish in during the absence of the cutter. After I had settled with the two men for their services, both of whom had large sums to receive, they took leave of us, and went on board.

My own time had been fully occupied for the last two days, in writing letters and preparing despatches; by great exertions I got all ready this evening, and upon Mr. Germain's coming up at night, I delivered them to him, and directed him to sail as soon as possible. The following copy of my despatch to his Excellency the Governor, will convey a brief summary of the result of the expedition; from the time of our leaving Port Lincoln up to the sailing of the Waterwitch from Fowler's Bay, and of the future plans I intended to adopt, to carry out the object of the undertaking.

"*Point Fowler, 17th December,* 1840.

"SIR,—By the return of the Waterwitch, I have the honour to furnish you, for the information of His Excellency the Governor, with a brief account of our proceedings up to the present date.

"Upon the return of Mr. Scott from Adelaide to Port Lincoln, I left the latter place on the 24th October, following my

former line of route along the coast to Streaky Bay, and rejoining my party there on the 3rd November.

"The Waterwitch had already arrived with the stores sent for the use of the expedition, and I have since detained her to co-operate with my party, in accordance with the kind permission of his Excellency the Governor.

"From previous experience, I was aware, that after leaving Streaky Bay, we should have obstacles of no ordinary kind to contend with; and as I advanced, I found the difficulties of the undertaking even greater than I had anticipated; the heavy sandy nature of the country, its arid character, the scarcity of grass, and the very dense brushes through which we had frequently to clear a road with our axes, formed impediments of no trifling description, and such as, when combined with the very unfavourable season of the year, we could hardly have overcome without the assistance of the Waterwitch. By putting on board the cutter the greater part of our dead weight, we relieved our jaded horses from loads they could no longer draw; and by obtaining from her occasional supplies of water at such points of the coast as we could procure none on shore, we were enabled to reach Fowler's Bay on the 22nd November.

"From this point I could no longer avail myself of the valuable services of the cutter, the wild unprotected character of the coast extending around the Great Australian Bight, rendering it too dangerous for a vessel to attempt to approach so fearful a shore, and where there is no harbour or shelter of any kind to make for in case of need.

"Under these circumstances, I left my party in camp behind Point Fowler, whilst I proceeded myself, accompanied by a native boy, to examine the country a-head, and I now only detained the Waterwitch, in the hopes that by penetrating on horseback beyond the head of the Great Bight, I might be able to give his Excellency some idea of our future prospects.

"For the last twenty-four days I have been engaged in attempting to round the head of the Bight; but so difficult is the country, that I have not as yet been able to accomplish it. In

my first essay I was driven back by the want of water, and obliged to abandon one of my horses. This animal I subsequently recovered.

"In my second attempt, I went, accompanied by one of my native boys, and a man driving a dray loaded solely with water and our provisions; but such was the dreadful nature of the country, that after penetrating to within twelve miles of the head of the Bight, I was again obliged to abandon three of our horses, a dray, and our provisions. The poor horses were so exhausted by previous fatigue and privation, that they could not return, and I was most reluctantly obliged to leave them to obtain relief for ourselves, and the two remaining horses we had with us. After reaching the nearest water, we made every effort to save the unfortunate animals we had left behind; and for seven days, myself, the man, and a boy, were incessantly and laboriously engaged almost day and night in carrying water backwards and forwards to them—feeding them with bread, gruel, &c. I regret to say that all our efforts were in vain, and that the expedition has sustained a fatal and irreparable injury in the loss of three of its best draught horses. The dray and the provisions I subsequently recovered, and on the evening of the 15th December, I rejoined my party behind Point Fowler, to prepare despatches for the Waterwitch, since the weak and unserviceable condition of nearly the whole of our remaining horses rendered any further attempt to penetrate so inhospitable a region quite impracticable for the present. In traversing the country along the coast from Streaky Bay to the limits of our present exploration, within twelve miles of the head of the Great Bight, we have found the country of a very uniform description—low flat lands, or a succession of sandy ridges, densely covered with a brush of *eucalyptus dumosa*, salt water tea-tree, and other shrubs—whilst here and there appear a few isolated patches of open grassy plains, scattered at intervals among the scrub. The surface rock is invariably an oolitic limestone, mixed with an imperfect freestone, and in some places exhibits fossil banks, which bear evident marks of being of a very recent formation.

"The whole of this extent of country is totally destitute of surface water—we have never met with a watercourse, or pool of any description, and all the water we have obtained since we left Streaky Bay has been by digging, generally in the large drifts of pure white sand close to the coast. This is a work frequently of much time and labour, as from the depth we have had to sink, and the looseness of the sand, the hole has often filled nearly as fast as we could clear it out; the water too thus obtained has almost always been brackish, occasionally salt. Latterly even this resource has failed us; after digging a few feet we have been impeded by rock, which gradually approaching nearer the surface towards the head of the Great Bight, at last occupies its whole extent, unless where partially concealed by sand-drifts, or low sandy ridges covered with brush. We have seen no trees or timber of any kind of larger growth than the scrub, nor have we met with the Casuarinæ since we left Streaky Bay.

"The natives along this coast are not very numerous; those we have met with have been timid, but friendly, and in some instances have rendered us important assistance in guiding us through the brush, and shewing us where to dig for water—their language appears to be a good deal similar to that at King George's Sound. When questioned about the interior towards the north, they invariably assert that there is no fresh water inland; nor could we discover that they are acquainted with the existence of a large body of water of any kind in that direction.

"Hitherto the reduced condition of my horses, the nature of the country, and the season of the year, have effectually prevented my examining the interior beyond a very few miles from the coast. When we have once rounded the Bight (and I confidently hope to accomplish this), the country may perhaps alter its character so far as to enable me to prosecute the main object of the expedition, that of examining the Northern Interior. Should such unfortunately not be the case, I shall endeavour to examine the line of coast as far as practicable towards King

George's Sound, occasionally radiating inland whenever circumstances may admit of it.

"The very severe loss the expedition has sustained in the death of four of its best horses since leaving Adelaide in June last, added to the unfavourable season of the year, and the embarrassing nature of the country, have rendered it impossible for me to carry provisions for the whole party for a length of time sufficient to enable me to prosecute the undertaking I am engaged in with any prospect of success; whilst the wild and fearful nature of this breaker-beaten coast wholly precludes me from making use of the assistance and co-operation of the Waterwitch. I have consequently been under the necessity of reducing the strength of my already small party, and have sent two men back in the cutter; retaining only my overseer and one man, exclusive of Mr. Scott and two native boys. Upon leaving the depôt at Fowler's Bay, it is my intention to proceed with only a single dray to carry our provisions, instead of (as formerly) with two drays and a cart.

"From the reduced state of our horses, it will be absolutely necessary for us to remain in depôt five or six weeks to rest them. Such, however, is the dry and withered state of the little grass we have, and so destitute is it of all nutritive qualities, that I much fear that even at the expiration of this long respite from their labours, our horses will not have improved much in strength or condition. I have therefore unhesitatingly taken advantage of the very kind permission of his Excellency the Governor, to request that a supply of oats and bran may be sent to us, should his Excellency not require the services of the Waterwitch for more important employment. For ourselves we require no additional provisions, the most liberal and abundant supply we formerly received being fully sufficient to last us for six months longer.

"I have much pleasure in recording the continued steadiness and good conduct of my men, and I regret extremely the necessity which has compelled me to dispense with the services of

two of them before the termination of the expedition, and after they have taken so considerable a share in its labours.

"I have the honor to be, Sir,

"Your very obedient servant,

"EDW. JOHN EYRE.

"*To Geo. Hall, Esq., Private Secretary, &c.*"

After the departure of the cutter, our mode of life was for some time very monotonous, and our camp bore a gloomy and melancholy aspect; the loss of two men from our little band, made a sad alteration in its former cheerful character. Mr. Scott usually employed himself in shooting or fishing; one of the native boys was always out shepherding the sheep, and the only remaining man I had was occupied in attending to the horses, so that there were generally left only myself, the overseer, and one native boy at the camp, which was desolate and gloomy, as a deserted village. The overseer was pretty well employed, in making boots for the party, in shoeing the horses, repairing the harness, and in doing other little odd jobs of a similar kind; the black boys took their turns in shepherding the sheep; but I was without active employment, and felt more strongly than any of them that relaxation of body and depression of spirits, which inactivity ever produces.

For a time indeed, the writing up of my journals, the filling up my charts, and superintending the arranging, packing, and burying of our surplus stores, amused and occupied me, but as these were

soon over, I began to repine and fret at the life of indolence and inactivity I was doomed to suffer. Frequently required at the camp, to give directions about, or to assist in the daily routine of duty, I did not like to absent myself long away at once; there were no objects of interest near me, within the limits of a day's excursion on foot, and the weak state of the horses, prevented me from making any examinations of the country at a greater distance on horseback; I felt like a prisoner condemned to drag out a dull and useless existence through a given number of days or weeks, and like him too, I sighed for freedom, and looked forward with impatience, to the time when I might again enter upon more active and congenial pursuits. Fatigue, privation, disappointment, disasters, and all the various vicissitudes, incidental to a life of active exploration had occasionally, it is true, been the source of great anxiety or annoyance, but all were preferable to that oppressive feeling of listless apathy, of discontent and dissatisfaction, which resulted from the life I was now obliged to lead.

Christmas day came, and made a slight though temporary break in the daily monotony of our life. The kindness of our friends had supplied us with many luxuries; and we were enabled even in the wilds, to participate in the fare of the season: whilst the season itself, and the circumstances under which it was ushered in to us, called forth feelings and associations connected with other scenes and with

friends, who were far away; awakening, for a time at least, a train of happier thoughts and kindlier feelings than we had for a long time experienced.

On the 26th, I found that our horses and sheep were falling off so much in condition, from the scarcity of grass, and its dry and sapless quality, that it became absolutely necessary for us to remove elsewhere; I had already had all our surplus stores and baggage headed up in casks, or packed in cases, and carefully buried (previously covered over with a tarpaulin and with bushes to keep them from damp), near the sand-hills, and to-day I moved on the party for five miles to the well in the plains; the grass here was very abundant, but still dry, and without much nourishment; the water was plentiful, but brackish and awkward to get at, being through a hole in a solid sheet of limestone, similar to that behind Point Brown. Upon cleaning it out and deepening it a little, it tasted even worse than before, but still we were thankful for it.

The geological character of the country was exactly similar to that we had been in so long, entirely of fossil formation, with a calcareous oolitic limestone forming the upper crusts, and though this was occasionally concealed by sand on the surface, we always were stopped by it in digging; it was seemingly a very recent deposit, full of marine shells, in every stage of petrifaction. Granite we had not seen for some time, though I have no doubt that it occasionally protrudes; a small piece, found

near an encampment of the natives, and evidently brought there by them, clearly proved the existence of this rock at no very great distance, probably small elevations of granite may occasionally be found among the scrubs, similar to those we had so frequently met with in the same character of country. Another substance found at one of the native encampments, and more interesting to us, not having been before met with, was a piece of pure flint, of exactly the same character as the best gun flint. This probably had been brought from the neighbourhood of the Great Bight, in the cliffs of which Captain Flinders imagined he saw chalk, and where I hoped that some change in the geological formation of the country would lead to an improvement in its general appearance and character.

The weather had been (with the exception of one or two hot days) unusually cold and favourable for the time of year. Our horses had enjoyed a long rest, and though the dry state of the grass had prevented them from recovering their condition, I hoped they were stronger and in better spirits, and determined to make one more effort to get round the head of the Bight;—if unsuccessful this time, I knew it would be final, as I should no longer have the means of making any future trial, for I fully made up my mind to take all our best and strongest animals, and either succeed in the attempt or lose all.

On the 29th, I commenced making preparations, and on the following day left the camp, the sheep, and

four horses in charge of Mr. Scott and the youngest of the native boys, whilst I proceeded myself, accompanied by the overseer and eldest native boy on horseback, and a man driving a dray with three horses, to cross once more through the scrub to the westward. We took with us three bags of flour, a number of empty casks and kegs, and two pack-saddles, besides spades and buckets, and such other minor articles as were likely to be required. It was late in the day when we arrived at the plains under the sand hills; and though we had brought our six best and strongest horses, they were greatly fagged with their day's work. We had still to take them some distance to the water, and back again to the grass. At the water we found traces of a great many natives who appeared to have left only in the morning, and who could not be very far away; none were however seen.

December 31.—We remained in camp to rest the horses, and took the opportunity of carrying up all the water we could, every time the animals went backwards and forwards, to a large cask which had been fixed on the dray. The taste of the water was much worse than when we had been here before, being both salter and more bitter; this, probably, might arise from the well having been dug too deep, or from the tide having been higher than usual, though I did not notice that such had been the case. In the afternoon we buried the three bags of flour we had brought headed up in a cask.

January 1, 1841.—This morning I went down with the men to assist in watering the horses, and upon returning to the camp, found my black boy familiarly seated among a party of natives who had come up during our absence. Two of them were natives I had seen to the north-west, and had been among the party whose presence at the plains, on the 5th of December, when I was surrounded by so many difficulties, had proved so annoying to us at the time, and so fatal in its consequences to our horses. They recognised me at once, and apparently described to the other natives, the circumstances under which they had met me, lamenting most pathetically the death of the horses; the dead bodies of which they had probably seen in their route to the water. Upon examining their weapons they shewed us several that were headed with flint, telling us that they procured it to the north-west, thus confirming my previous conjectures as to the existence of flint in that direction. To our inquiries about water, they still persisted that there was none inland, and that it took them five days, from where we were, to travel to that at the head of the Bight. No other, they said, existed in any direction near us, except a small hole to the north-west, among some sand hills, about two miles off; these they pointed out, and offered to go with me and shew me the place where the water was. I accepted the offer, and proceeded to the sand-drifts, accompanied by one of them. On our arrival he shewed me the remains of a large

deep hole that had been dug in one of the sandy flats; but in which the water was now inaccessible, from the great quantity of sand that had drifted in and choked it up. By forcing a spear down to a considerable depth, the native brought it out moist, and shewed it me to prove that he had not been deceiving me. I now returned to the camp, more than ever disposed to credit what I had been told relative to the interior. I had never found the natives attempt to hide from us any waters that they knew of, on the contrary, they had always been eager and ready to point them out, frequently accompanying us for miles, through the heat and amongst scrub, to shew us where they were. I had, therefore, no reason to doubt the accuracy of their statements when they informed me that there was none inland! Many different natives, and at considerable intervals of country apart, had all united in the same statement, and as far as I had yet been able to examine so arid a country personally, my own observations tended to confirm the truth of what they had told me.

In the evening several of the natives went down with the men to water the horses, and when there drank a quantity of water that was absolutely incredible, each man taking from three to four quarts, and this in addition to what they got at the camp during the earlier part of the day. Strange that a people who appear to do with so little water, when traversing the deserts, should use it in such excess when the opportunity of indulgence occurs to them,

yet such have I frequently observed to be the case, and especially on those occasions where they have least food. It would seem that, accustomed generally to have the stomach distended after meals, they endeavour to produce this effect with water, when deprived of the opportunity of doing so with more solid substances. At night the natives all encamped with us in the plain.

January 2.—Having watered the horses early, we left the encampment, accompanied by some of the natives, to push once more to the north-west. On the dray we had eighty-five gallons of water; but as we had left all our flour, and some other articles, I hoped we should get on well. The heavy nature of the road, however, again told severely upon the horses: twice we had to unload the dray, and at last, after travelling only fourteen miles, the horses could go no further; I was obliged, therefore, to come to a halt, and decide what was best to be done. There appeared to be a disastrous fatality attending all our movements in this wretched region, which was quite inexplicable. Every time that we had attempted to force a passage through it, we had been baffled and driven back. Twice I had been obliged to abandon our horses before; and on the last of these occasions had incurred a loss of the three best of them; now, after giving them a long period of rest, and respite from labour, and after taking every precaution which prudence or experience could suggest, I had the mortification of find-

ing that we were in the same predicament we had been in before, and with as little prospect of accomplishing our object. Having but little time for deliberation, I at once ordered the overseer and man to take the horses back to the water, and give them two days rest there, and then to rejoin us again on the third, whilst I and the native boy would remain with the dray, until their return. The natives also remained with us for the first night; but finding we still continued in camp, they left on the following morning, which I was sorry for, as I hoped one would have been induced to go with us to the Great Bight.

On the fifth of January, the overseer and man returned with the horses; but so little had they benefited by their two days rest, that upon being yoked up, and put to the dray, they would not move it. We were obliged, therefore, to unload once more, and lighten the load by burying a cask of water, and giving another to the horses. After this, we succeeded in getting them along, with the remainder, to the undulating plains; and here we halted for the night, after a stage of only seven miles, but one, which, short as it was, had nearly worn out the draught horses. Here we dug a large hole, and buried twenty-two gallons of water, for my own horse, and that of the black boy, on our return; and as I determined to take a man with me, with a pack-horse, nine gallons more were buried apart from the other, for them, so that when the man got his cask

of water, he might not disturb ours, or leave traces by which the natives could discover it.

January 6.—Sending back the dray with the overseer, at the first dawn of day, I and the native boy proceeded to the north-west, accompanied by the man leading a pack-horse with twelve gallons of water. The day turned out hot, and the road was over a very heavy sandy country; but by eleven o'clock we had accomplished a distance of seventeen miles, and had reached the furthest point from which I turned back on the 1st December. I walked alternately with the boy, so as not to oppress the riding horses, but the man walked all the way.

The weather was most intensely hot, a strong wind blowing from the north-east, throwing upon us an oppressive and scorching current of heated air, like the hot blast of a furnace. There was no misunderstanding the nature of the country from which such a wind came; often as I had been annoyed by the heat, I had never experienced any thing like it before. Had anything been wanting to confirm my previous opinion of the arid and desert character of the great mass of the interior of Australia, this wind would have been quite sufficient for that purpose. From those who differ from me in opinion (and some there are who do so whose intelligence and judgment entitle their opinion to great respect), I would ask, could such a wind be be wafted over an inland sea? or could it have

passed over the supposed high, and perhaps snow-capped mountains of the interior.

We were all now suffering greatly from the heat; the man who was with me was quite exhausted: under the annoyances of the moment, his spirits failed him, and giving way to his feelings of fatigue and thirst, he lay rolling on the ground, and groaning in despair; all my efforts to rouse him were for a long time in vain, and I could not even induce him to get up to boil a little tea for himself. We had halted about eleven in the midst of a low sandy flat, not far from the sea, thinking, that by a careful examination, we might find a place where water could be procured by digging. There were, however, no trees or bushes near us; and the heat of the sun, and the glare of the sand, were so intolerable, that I was obliged to get up the horses, and compel the man to go on a little further to seek for shelter.

Proceeding one mile towards the sea, we came to a projecting rock upon its shores; and as there was no hope of a better place being found, I tied up my horses near it; the rock was not large enough to protect them entirely from the sun, but by standing close under it, their heads and necks were tolerably shaded. For ourselves, a recess of the rock afforded a delightful retreat, whilst the immediate vicinity of the sea enabled us every now and then to take a run, and plunge amidst its breakers, and again return to the

shelter of the cavern. For two or three hours we remained in, under the protection of the rock, without clothes, and occasionally bathing to cool ourselves. The native boy and I derived great advantage from thus dipping in the sea, but it was a long time before I could induce the man to follow our example, either by persuasion or threats; his courage had failed him, and he lay moaning like a child. At last I succeeded in getting him to strip and bathe, and he at once found the benefit of it, becoming in a short time comparatively cool and comfortable. We then each had a little more tea, and afterwards attempted to dig for water among the sand-hills. The sand, however, was so loose, that it ran in faster than we could throw it out, and we were obliged to give up the attempt.

As the afternoon was far advanced, we saddled the horses, and pushed on again for five miles, hoping, but in vain, to find a little grass. At night we halted among the sandy ridges behind the sea-shore, and after giving the horses four quarts of oats and a bucket of water a-piece, we were obliged to tie them up, there not being a blade of grass anywhere about. The wind at night changed to the south-west, and was very cold, chilling us almost as much as the previous heat had oppressed us. These sudden and excessive changes in temperature induce great susceptibility in the system, and expose the traveller to frequent heats and chills that cannot be otherwise than injurious to the constitution.

January 7.—Having concealed some water, provisions, and the pack-saddle at the camp, I sent the man back with the pack-horse to encamp at the undulating plains, where nine gallons of water had been left for him and his horse, and the following day he was to rejoin the overseer at the sand hills.

To the latter I sent a note, requesting him to send two fresh horses to meet me at the plains on the 15th of January, for, from the weak condition of the animals we had with us, and from the almost total absence of grass for them, I could not but dread lest we might be obliged to abandon them too, and in this case, if we did not succeed in finding water, we should perhaps have great difficulty in returning ourselves.

As soon as the man was gone, we once more moved on to the north-west, through the same barren region of heavy sandy ridges, entirely destitute of grass or timber. After travelling through this for ten miles, we came upon a native pathway, and following it under the hummocks of the coast for eight miles, lost it at some bare sand-drifts, close to the head of the Great Bight, where we had at last arrived, after our many former ineffectual attempts.

Following the general direction the native pathway had taken, we ascended the sand-drifts, and finding the recent tracks of natives, we followed them from one sand-hill to another, until we suddenly came upon four persons encamped by a hole

dug for water in the sand. We had so completely taken them by surprise, that they were a good deal alarmed, and seizing their spears, assumed an offensive attitude. Finding that we did not wish to injure them, they became friendly in their manner, and offered us some fruit, of which they had a few quarts on a piece of bark. This fruit grows upon a low brambly-looking bush, upon the sand-hills or in the flats, where the soil is of a saline nature. It is found also in the plains bordering upon the lower parts of the Murrumbidgee, but in much greater abundance along the whole line of coast to the westward. The berry is oblong, about the shape and size of an English sloe, is very pulpy and juicy, and has a small pyramidal stone in the centre, which is very hard and somewhat indented. When ripe it is a dark purple, a clear red, or a bright yellow, for there are varieties. The purple is the best flavoured, but all are somewhat saline in taste. To the natives these berries are an important article of food at this season of the year, and to obtain them and the fruit of the mesembryanthemum, they go to a great distance, and far away from water. In eating the berries, the natives make use of them whole, never taking the trouble to get rid of the stones, nor do they seem to experience any ill results from so doing.

Having unsaddled the horses, we set to work to dig holes to water them; the sand, however, was very loose, and hindered us greatly. The natives,

who were sitting at no great distance, observed the difficulty under which we were labouring, and one of them who appeared the most influential among them, said something to two of the others, upon which they got up and came towards us, making signs to us to get out of the hole, and let them in; having done so, one of them jumped in, and dug, in an incredibly short time, a deep narrow hole with his hands; then sitting so as to prevent the sand running in, he ladled out the water with a pint pot, emptying it into our bucket, which was held by the other native. As our horses drank a great deal, and the position of the man in the hole was a very cramped one, the two natives kept changing places with each other, until we had got all the water we required.

In this instance we were indebted solely to the good nature and kindness of these children of the wilds for the means of watering our horses: unsolicited they had offered us their aid, without which we never could have accomplished our purpose. Having given the principal native a knife as a reward for the assistance afforded us, we offered the others a portion of our food, being the only way in which we could shew our gratitude to them; they seemed pleased with this attention, and though they could not value the gift, they appeared to appreciate the motives which induced it.

Having rested for a time, and enjoyed a little tea, we inquired of the natives for grass for our horses,

as there was none to be seen anywhere. They told us that there was none at all where we were, but they would take us to some further along the coast, where we could also procure water, without difficulty, as the sand was firm and hard, and the water at no great depth. Guided by our new friends, we crossed the sand-hills to the beach, and following round the head of the Great Bight for five miles, we arrived at some more high drifts of white sand; turning in among these, they took us to a flat where some small holes were dug in the sand, which was hard and firm; none of them were two feet deep, and the water was excellent and abundant: the name of the place was Yēer-kūmbăn-kāuwĕ.

Whilst I was employed in digging a large square hole, to enable us to dip the bucket when watering the horses, the native boy went, accompanied by one of the natives as a guide, to look for grass. Upon his return, he said he had been taken to a small plain about a mile away, behind the sand hills, where there was plenty of grass, though of a dry character; to this we sent the horses for the night. In returning, a few sea fowl were shot as a present for our friends, with whom we encamped, gratified that we had at last surmounted the difficulty of rounding the Great Bight, and that once more we had a point where grass and water could be procured, and from which we might again make another push still further to the westward.

In the evening, we made many inquiries of the

natives, as to the nature of the country inland, the existence of timber, rocks, water, &c. and though we were far from being able to understand all that they said, or to acquire half the information that they wished to convey to us, we still comprehended them sufficiently to gather many useful and important particulars. In the interior, they assured us, most positively, there was no water, either fresh or salt, nor anything like a sea or lake of any description.

They did not misunderstand us, nor did we misapprehend them upon this point, for to our repeated inquiries for salt water, they invariably pointed to a salt lake, some distance behind the sand-hills, as the only one they knew of, and which at this time we had not seen.

With respect to hills or timber, they said, that neither existed inland, but that further along the coast to the westward, we should find trees of a larger growth, and among the branches of which lived a large animal, which by their description, I readily recognized as being the Sloth of New South Wales; an animal whose habits exactly agreed with their description, and which I knew to be an inhabitant of a barren country, where the scrub was of a larger growth than ordinary. One of the natives had a belt round his waist, made of the fur of the animal they described, and on inspecting it, the colour and length of the hair bore out my previous impression.

The next water along the coast we were informed,

was ten days journey from Yeerkumban kauwe, and was situated among sand-drifts, similar to those we were at, but beyond the termination of the line of cliffs, extending westward from the head of the Bight, and which were distinctly visible from the shore near our camp. These cliffs they called, "Bundăh," and at two days' journey from their commencement, they told us were procured the specimens of flints (Julă) we had seen upon their weapons, and of which one or two small pieces had been picked up by us among the sand-drifts, having probably been dropped there by the natives.

January 8.—To-day we remained in camp to recruit the horses, and the natives remained with us; soon after breakfast one of them lit a signal fire upon a sand-hill, and not long afterwards we were joined by three more of the tribe, but the women kept out of sight. I now sent the native boy out with one to shoot birds for them, but he came back with only a single crow, and I was obliged to go myself, to try whether I could not succeed better. Being lucky enough to procure four, I gave them to the natives, and returning to the camp we all dined, and afterwards lay down to rest for an hour.

Upon getting up, I missed a knife I had been using, and which had been lying beside me. One of the strange natives who had come to the camp this morning, had been sitting near me, and I at once suspected him to be the thief, but he was now gone, and I had no prospect of recovering the lost

article. In the afternoon, the stranger came up to the camp again, and I at once taxed him with the theft; this he vehemently denied, telling me it was lost in the sand, and pretending to look anxiously for it; he appeared, however, restless and uneasy, and soon after taking up his spears went away with two others. My own native boy happened to be coming over the sand-hills at the time, but unobserved by them, and as they crossed the ridge he saw the man I had accused stop to pick something up, and immediately called out to me; upon this I took my gun, and ascending the hill, saw the native throw down the knife, which my own boy then picked up; the other natives had now come up, and seemed very anxious to prevent any hostilities, and to the chief of those who had been so friendly with us, I explained as well as I could the nature of the misunderstanding, and requested him to order the dishonest native away, upon which he spoke to them in his own language, and all took up their spears and went away, except himself and one other. These two men remained with us until dark, but as the evening appeared likely to be wet, they left us also, when we lay down for the night.

January 9.—The morning set in cold, dark and rainy, and as much wet had fallen during the night, we had been thoroughly drenched through, our fire had been extinguished, and it was long before we could get it lit again, and even then we could hardly keep it in; the few bushes among the sand

hills were generally small, and being for the most part green as well as wet, it required our utmost efforts to prevent the fire from going out; so far indeed were we from being either cheered or warmed by the few sparks we were able to keep together, that the chill and comfortless aspect of its feeble rays, made us only shiver the more, as the rain fell coldly and heavily upon our already saturated garments. About noon the weather cleared up a little, and after getting up and watering the horses, we collected a large quantity of firewood and made waterproof huts for ourselves. The rain, however, was over, and we no longer required them.

CHAPTER XIV.

PROCEED TO THE WESTWARD—CLIFFS OF THE GREAT BIGHT —LEVEL NATURE OF THE INTERIOR—FLINTS ABOUND— RETURN TO YEER-KUMBAN-KAUWE — NATIVES COME TO THE CAMP — THEIR GENEROUS CONDUCT — MEET THE OVERSEER—RETURN TO DEPÔT—BAD WATER—MOVE BACK TO FOWLER'S BAY—ARRIVAL OF THE CUTTER HERO— JOINED BY THE KING GEORGE'S SOUND NATIVE—INSTRUCTIONS RELATIVE TO THE HERO—DIFFICULTY OF FIXING UPON ANY FUTURE PLAN—BREAK UP THE EXPEDITION AND DIVIDE THE PARTY—MR. SCOTT EMBARKS—FINAL REPORT—THE HERO SAILS—OVERSEER AND NATIVES REMAIN—EXCURSION TO THE NORTH—A NATIVE JOINS US —SUDDEN ILLNESS IN THE PARTY—FINAL PREPARATIONS FOR LEAVING THE DEPÔT.

January 10.—We left Yeer-kumban-kauwe early, and proceeding to the westward, passed through an open level tract of country, of from three to four hundred feet in elevation, and terminating seawards abruptly, in bold and overhanging cliffs, which had been remarked by Captain Flinders, but which upon our nearer approach, presented nothing very remarkable in appearance, being only the sudden termination of a perfectly level country, with its outer face washed, steep and precipitous, by the unceasing lash of the southern ocean. The upper surface of this country, like that of all we had passed through lately, consisted of a calcareous oolitic limestone,

below which was a hard concrete substance of sand or of reddish soil, mixed with shells and pebbles; below this again, the principal portion of the cliff consisted of a very hard and coarse grey limestone, and under this a narrow belt of a whitish or cream-coloured substance, lying in horizontal strata; but what this was we could not yet determine, being unable to get down to it any where. The cliffs were frightfully undermined in many places, enormous masses lay dissevered from the main land by deep fissures, and appearing to require but a touch to plunge them headlong into the abyss below. Back from the sea, the country was level, tolerably open, and covered with salsolæ, or low, prickly shrubs, with here and there belts of the eucalyptus dumosa. In places two or three miles back from the coast there was a great deal of grass, that at a better season of the year would have been valuable; now it was dry and sapless. No timber was visible any where, nor the slightest rise of any kind. The whole of this level region, elevated as it was above the sea, was completely coated over with small fresh water spiral shells, of two different kinds.

After travelling about twenty-five miles along the cliffs, we came all at once to innumerable pieces of beautiful flint, lying on the surface, about two hundred yards inland. This was the place at which the natives had told us they procured the flint; but how it attained so elevated a position, or by what means it became scattered over the surface in such

great quantities in that particular place, could only be a matter of conjecture. There was no change whatever in the character or appearance of the country, or of the cliffs, and the latter were as steep and impracticable as ever.

Five miles beyond the flint district we turned a little inland and halted for the night upon a patch of withered grass. During the day we had been fortunate enough to find a puddle of water in a hollow of the rock left by yesterday's rain, at which we watered the horses, and then lading out the remainder into our bucket carefully covered it up with a stone slab until our return, as I well knew, if exposed to the sun and wind, there would not be a drop left in a very few hours. Kangaroos had been seen in great numbers during the day, but we had not been able to get a shot at one. Our provisions were now nearly exhausted, and for some days we had been upon very reduced allowances, so that it was not without some degree of chagrin that we saw so many fine animals bounding unscathed around us.

January 11.—Having travelled fifteen miles further along the cliffs, I found them still continue unchanged, with the same level uninteresting country behind. I had now accomplished all that I expected to do on this excursion, by ascertaining the character of the country around the Great Bight; and as our horses were too weak to attempt to push beyond the cliffs to the next water, and as we ourselves were

without provisions, I turned homewards, and by making a late and forced march, arrived at the place where we had left the bucket of water, after a day's ride of forty-five miles. Our precaution as we had gone out proved of inestimable value to us now. The bucket of water was full and uninjured, and we were enabled thus to give our horses a gallon and a half each, and allow them to feed upon the withered grass instead of tying them up to bushes, which we must have done if we had had no water.

January 12.—In our route back to "Yeer-kumban-kauwe" we were lucky enough to add to our fare a rat and a bandicoot, we might also have had a large brown snake, but neither the boy nor I felt inclined to experimentalise upon so uninviting an article of food; after all it was probably mere prejudice, and the animal might have been as good eating as an eel. We arrived at the water about noon, and the remainder of the day afforded a grateful rest both to ourselves and to the horses.

January 13.—Our fire had gone out during the night, and all our matches being wet, we could not relight it until noon, when the rays of a hot sun had dried them again. Having eaten our slender dinner, I walked out to water the horses, leaving the boy in charge of the camp. Upon my return I found him comfortably seated between two of our friends the natives, who had just returned from a hunting excursion, bringing with them the half roasted carcase of a very fine kangaroo. They had already bestowed

upon the boy two very large pieces, and as soon as I made my appearance they were equally liberal to me, getting up the moment I arrived at the camp, and bringing it over to me of their own accord. The supply was a most acceptable one, and we felt very grateful for it. Having received as much of the kangaroo as would fully last for two days, I gave a knife in return to the eldest of the men, with which he seemed highly delighted. I would gladly have given one to the other also, but I had only one left, and could not spare it. The natives remained in camp with us for the night, and seemed a good deal surprised when they saw us re-roasting the kangaroo; frequently intimating to us that it had already been cooked, and evidently pitying the want of taste which prevented us from appreciating their skill in the culinary art.

January 14.—Upon our leaving this morning the natives buried in the sand the remains of their kangaroo, and accompanied us a mile or two on our road, then turning in among the sand-hills they returned to renew their feast. They had been eating almost incessantly ever since they arrived at the water yesterday, and during the night they had repeatedly got up for the same purpose. The appetites of these people know no restraint when they have the means of gratifying them; they have no idea of temperance or prudence, and are equally regardless of the evil resulting from excess as they are improvident in preparing for the necessities of

the morrow—"sufficient (literally so to them) for the day is the evil thereof."

In our route to-day instead of following round the sea-shore, we struck across behind the sand-hills, from "Yeerkumban-kauwe" to the water we had first found on the 7th of January, and in doing so we passed along a large but shallow salt-water lake, which the natives had pointed to on the evening of the 7th, when I made inquiries relative to the existence of salt water inland. The margin of this lake was soft and boggy, and we were nearly losing one of our horses which sank unexpectedly in the mud. About noon we arrived at the camp, from which I had sent the man back on the 6th, and having picked up the water and other things left there, proceeded to the sand-hills near which we had halted during the intense heat of that day. We now rested for several hours, and again moved onwards about eleven at night to avoid the great heat of the day whilst crossing the sandy country before us.

January 15.—At sunrise we arrived at the undulating plains, where twenty gallons of water had been left buried for us. Here I found the overseer with two fresh horses, according to the instructions I had sent him on the 6th, by the man who returned. After resting for an hour or two, I set off with the native boy upon the fresh horses, and rode to the water at the sand-drifts, leaving the overseer to bring on the tired animals the next day. It was

nearly dark when we arrived at the plain under the sand-hills, and very late before we had watered the horses and brought them back to the grass.

January 16.—After breakfast, in returning from the water, we had a feast upon some berries, growing on the briary bushes behind the sand-hills; they were similar to those the natives had offered to us, at the head of the Bight, on the 7th, were very abundant, and just becoming ripe. About eight o'clock we set off for the depôt, and arrived there at two, glad to reach our temporary home once more, after eighteen days absence, and heartily welcomed by Mr. Scott, who complained bitterly of having been left alone so long. Under the circumstances of the case, however, it had been quite unavoidable. Upon tasting the water at the well, I found, that from so much having been taken out, it had now become so very brackish, that it was scarcely usable, and I decided upon returning again to Fowler's Bay, where the water was good, as soon as the overseer came back.

January 17.—Spent the day in writing, and in meditating upon my future plans and prospects. I had now been forty-five miles beyond the head of the Great Bight, that point to which I had looked with interest and hope; now, I had ascertained that no improvement took place there, in the appearance or character of the country, but, if any thing, that it became less inviting, and more arid. The account of the natives fully satisfied me that there was no

possibility of getting inland, and my own experience told me that I could never hope to take a loaded dray through the dreadful country I had already traversed on horseback. What then was I to do? or how proceed for the future? The following brief abstract of the labours of the party, and the work performed by the horses in the three attempts made to get round the head of the Great Bight, may perhaps seem incredible to those who know nothing of the difficulty of forcing a passage through such a country as we were in, and amidst all the disadvantages we were under, from the season of the year and other causes.

ABSTRACT OF LABOURS OF THE PARTY IN ROUNDING THE GREAT BIGHT.

Names.	Distances ridden.	No. of days employed.
Mr Eyre	643 miles	40
Mr. Scott	50 ,,	4
The Overseer . . .	230 ,,	22
Costelow	. . . .	22
Houston	. . . .	12
Corporal Coles . .	. . . .	8
Eldest native boy .	270 ,,	19
Youngest native boy	395 ,,	23

A dray loaded with water was drawn backwards and forwards 238 miles; many of the horses, in addition to the distances they were ridden, or worked in the dray, were driven loose, in going or returning,

for about eighty miles. Most of the party walked considerable distances in addition to those ridden. All the party were engaged, more or less, in connection with the three attempts to round the Bight, as were also all the horses, and of the latter, three perished from over fatigue and want of water. Yet, after all, the distance examined did not exceed 135 miles, and might have been done easily in ten days, and without any loss, had the situation of the watering places, or the nature of the country, been previously known.

None but a person who has been similarly circumstanced, can at all conceive the incessant toil and harassing anxiety of the explorer; when baffled and defeated, he has to traverse over and over again the same dreary wastes, gaining but a few miles of ground at each fresh attempt, whilst each renewal of the effort but exhausts still more the strength and condition of his animals, or the energy and spirits of his men.

Upon maturely considering our circumstances and position, I decided to attempt to force a passage round the Great Bight, with pack-horses only, sending, upon the return of the cutter, all our heavy stores and drays in her to Cape Arid, if I found, upon her arrival, the instructions I might receive, would justify me in taking her so far beyond the boundaries of South Australia. This was the only plan that appeared to me at all feasible, and I determined to adopt it as soon as our horses were

sufficiently recruited to commence their labours again.

On the 18th, the overseer returned with the two jaded horses we had used on our last excursion, looking very wretched and weak. The day was intensely hot, with the wind due north: the thermometer in the shade, in a well lined tent, being 105° at 11, A.M.—a strong corroboration, if such were required, of the statement of the natives, that there was no large body of inland water. At 2, P.M. the wind changed to west, and the thermometer suddenly fell to 95°; a little afterwards, it veered to south-west, and again fell to 80°; the afternoon then became comparatively cool and pleasant.

The quality of the water at the well, was now beginning to affect the health of the whole party; and on the 19th and 20th I put into execution my resolution of removing to Fowler's Bay, where we again enjoyed the luxury of good water. Upon digging up the things we had left buried, we found them perfectly dry. On the 21st, I sent Mr. Scott down to the bay, to see if the cutter had come back, but she had not. On his return, he brought up a few fish he had caught, which, added to ten pigeons, shot by himself and the native boys, at the sand-hills, gave a little variety to our fare; indeed, for several days, after taking up our old position at Point Fowler, we were well supplied both with fish and pigeons.

Time passed gradually away until the evening of

the 25th, when a party of natives once more came up, and took up their abode near us — three were of those who had accompanied us all the way from Denial Bay, and some others had also been with us before. On the 26th, I went down myself to Fowler's Bay to look out for the cutter, which we now daily expected. Just as I arrived at the beach she came rounding into the bay, and Mr. Scott and myself got into our little boat, and pulled off to her, though with great difficulty, the wind blowing very fresh and dead against us, with the sea running high. We had three miles to go, and for a long time it was very doubtful whether we should succeed in reaching the vessel; our utmost efforts appearing barely to enable us to keep our ground. I was myself, at the best, not very skilful in using an oar, and neither of us had had much practice in pulling in a heavy sea. However, we got on board after a good deal of fatigue, and were rewarded by receiving many letters, both English and Colonial. I found that in returning to Adelaide the Waterwitch had proved so leaky as to be deemed unsafe for further service on so wild a coast, and that the Governor had, in consequence, with the promptness and consideration which so eminently distinguished him, chartered the "Hero," a fine cutter, a little larger than the Waterwitch, and placing her under the command of Mr. Germain, had sent him to our assistance. On board the Hero I was pleased to find the native from King George's Sound, named

LIBRARY OF THE BOMBAY BRANCH OF THE ASIATIC SOCIETY

Drawn by J. Neil

Wylie

London Published by T & W. Boone.

Wylie, whom I had sent for, and who was almost wild with delight at meeting us, having been much disappointed at being out of the way when I sent for him from Port Lincoln.

After receiving our despatches, and taking Wylie with us, we set sail for the shore, and then walked up in the evening to our depôt; my other two native boys were greatly rejoiced to find their old friend once more with them; they had much to tell to, and much to hear from each other, and all sat up to a late hour. For myself, the many letters I had received, gave me ample enjoyment and occupation for the night, whilst the large pile of newspapers from Adelaide, Swan River, and Sydney, promised a fund of interest for some time to come. Nothing could exceed the kindness and attention of our friends in Adelaide, who had literally inundated us with presents of every kind, each appearing to vie with the other in their endeavours to console us under our disappointments, to cheer us in our future efforts, and if possible, to make us almost forget that we were in the wilds. Among other presents I received a fine and valuable kangaroo-dog from my friend, Captain Sturt, and which had fortunately arrived safely, and in excellent condition.

The bran and oats which I had applied for had been most liberally provided, so that by remaining in depôt for a few weeks longer, we might again hope to get our horses into good condition. From his Excellency the Governor I

received a kind and friendly letter, acquainting me that the Hero was entirely at my disposal *within* the limits of South Australia, but that being under charter I could not take her to Cape Arid, or beyond the boundaries of the province, and requesting, that if I desired further aid, or to be met any where, at a future time, that I would communicate with the Government to that effect by the Hero's return. The whole tenor of his Excellency's letter evinced a degree of consideration and kindness that I could hardly have expected amidst the many anxious duties and onerous responsibilities devolving upon him at this time; and if any thing could have added to the feelings of gratitude and respect I entertained towards him, it would be the knowledge, that with the disinterested generosity of a noble mind, he was giving up a portion of his valuable time and attention to our plans, our wants, and our safety, at a time when the circumstances of the colony over which he presided had beset his own path with many difficulties, and when every day but added to the annoyances and embarrassments which a sudden reaction in the progress and prospects of the province necessarily produced.

In the instructions I received relative to the cutter, I have mentioned that I was restricted to employing her within the limits of the colony of South Australia, and thus, the plan I had formed of sending our drays and heavy stores in her to Cape Arid, whilst we proceeded overland ourselves with

pack-horses, was completely overturned, and it became now a matter of very serious consideration to decide what I should do under the circumstances. It was impossible for me to take my whole party and the drays overland through the dreadful country verging upon the Great Bight; whilst if I took the party, and left the drays, it was equally hopeless that I could carry upon pack-horses a sufficiency of provisions to last us to King George's Sound. There remained, then, but two alternatives, either to break through the instructions I had received with regard to the Hero, or to reduce my party still further, and attempt to force a passage almost alone. The first I did not, for many reasons, think myself justified in doing—the second, therefore, became my *dernier resort*, and I reluctantly decided upon adopting it.

It now became my duty to determine without delay who were to be my companions in the perilous attempt before me. The first and most painful necessity impressed upon me by the step I contemplated, was that of parting with my young friend, Mr. Scott, who had been with me from the commencement of the undertaking, and who had always been zealous and active in promoting its interests as far as lay in his power. I knew that, on an occasion like this, the spirit and enterprise of his character would prompt in him a wish to remain and share the difficulties and dangers to which I might be exposed: but I felt that I ought not to allow him to do so; I

had no right to lead a young enthusiastic friend into a peril from which escape seemed to be all but hopeless; and painful as it would be to us both to separate under such circumstances, there was now no other alternative; the path of duty was plain and imperative, and I was bound to follow it.

On the 28th, I took the opportunity, whilst walking down to the beach with Mr. Scott, of explaining the circumstances in which I was placed, and the decision to which I had been forced. He was much affected at the intelligence, and would fain have remained to share with me the result of the expedition, whatever that might be; but I dared not consent to it.

The only man left, belonging to the party, was the one who had accompanied me towards the head of the Great Bight, and suffered so much from the heat on the 6th January. His experience on that occasion of the nature of the country, and the climate we were advancing into, had, in a great measure, damped his ardour for exploring; so that when told that the expedition, as far as he was concerned, had terminated, and that he would have to go back to Adelaide with Mr. Scott; he did not express any regret. I had ever found him a useful and obedient man, and with the exception of his losing courage under the heat, upon the occasion alluded to, he had been a hardy and industrious man, and capable of enduring much fatigue.

The native boys I intended to accompany me in my journey, as they would be better able to put up

with the fatigues and privations we should have to go through, than Europeans; whilst their quickness of sight, habit of observation, and skill in tracking, might occasionally be of essential service to me. The native who had lately joined me from Adelaide, and whose country was around King George's Sound, would, I hoped, be able to interpret to any tribes we might meet with, as it appeared to me that some of the words we had heard in use among the natives of this part of the coast were very similar to some I had heard among the natives of King George's Sound. Three natives, however, were more than I required, and I would gladly have sent the youngest of them back to Adelaide, but he had been with me several years, and I did not like to send him away whilst he was willing to remain; besides, he was so young and so light in weight, that if we were able to get on at all, his presence could cause but little extra difficulty. I therefore decided upon taking him also.

There remained now only the overseer; a man who had been in my service for many years, and whose energy, activity, and many useful qualities, had made him an invaluable servant to me at all times; whilst his courage, prudence, good conduct, and fidelity, made me very desirous to have him with me in this last effort to cross to the westward. Having sent for him, I explained to him most fully the circumstances in which I was placed, the utter impossibility of taking on the whole party through so

inhospitable a region as that before us, my own firm determination never to return unsuccessful, but either to accomplish the object I had in view, or perish in the attempt. I pointed out to him that there were still eight hundred and fifty miles of an unknown country yet to be traversed and explored; that, in all probability, this would consist principally, if not wholly, of an all but impracticable desert. I reminded him of the fatigues, difficulties, and losses we had already experienced in attempting to reconnoitre the country only as far as the head of the Great Bight; and stated to him my own conviction, that from the knowledge and experience we had already acquired of the nature of the country; the journey before us must of necessity be a long and harassing one—one of unceasing toil, privation, and anxiety, whilst, from the smallness of our party, the probable want of water, and other causes, it would be one, also, of more than ordinary risk and danger. I then left him to determine whether he would return to Adelaide, in the cutter, or remain and accompany me. His reply was, that although he had become tired of remaining so long away in the wilds, and should be glad when the expedition had terminated, yet he would willingly remain with me to the last; and would accompany me to the westward at every hazard.

Our future movements being now arranged, and the division of the party decided upon, it remained only for me to put my plans into execution. The

prospect of the approaching separation, had cast a gloom over the whole party, and now that all was finally determined, I felt that the sooner it was over the better. I lost no time, therefore, in getting up all the bran and oats from the cutter, and in putting on board of her our drays, and such stores as we did not require, directing the master to hold himself in readiness to return to Adelaide immediately.

By the 31st January, every thing was ready; my farewell letters were written to the kind friends in Adelaide, to whom I owed so much; and my final report to the Chairman of the Committee, for promoting the expedition—that expedition being now brought to a close, and its members disbanded.

In the evening the man and Mr. Scott went on board the cutter, taking with them our three kangaroo dogs, which the arid nature of the country rendered it impossible for me to keep. I regretted exceedingly being compelled to part with the dogs, but it would have been certain destruction to them to have attempted to take them with me.

The following is a copy of my final report to the Chairman of the Northern Expedition Committee:—

"*Fowler's Bay, 30th Jan.*, 1841.

"Sir,—By the return of the *Hero* from Fowler's Bay, I have the honour to acquaint you, for the information of his Excellency the Governor, and the colonists interested, with the unsuccessful termination of the expedition placed under my command, for the purpose of exploring the northern interior. Since my last

report to his Excellency the Governor, containing an account of two most disastrous attempts to head the Great Australian Bight, I have, accompanied by one of my native boys, made a third and more successful one. On this occasion, I with some difficulty advanced about fifty miles beyond the head of the Great Bight, along the line of high cliffs described by Flinders, and which have hitherto been supposed to be composed principally of chalk. I found the country between the head of Fowler's Bay and the head of the Great Bight to consist of a succession of sandy ridges, all of which were more or less covered by a low scrub, and without either grass or water for the last sixty miles. This tract is of so uneven and heavy a nature that it would be quite impossible for me to take a loaded dray across it at this very unfavourable season of the year, and with horses so spiritless and jaded as ours have become, from the incessant and laborious work they have gone through during the last seven months. Upon rounding the head of the Bight, I met with a few friendly natives, who shewed me where both grass and water was to be procured, at the same time assuring me that there was no more along the coast for ten of their days' journeys, (probably 100 miles) or where the first break takes place in the long and continuous line of cliffs which extend so far to the westward of the head of the Great Bight. Upon reaching these cliffs I felt much disappointed, as I had long looked forward to some considerable and important change in the character of the country. There was, however, nothing very remarkable in their appearance, nor did the features of the country around undergo any material change. The cliffs themselves struck me as merely exhibiting the precipitous banks of an almost level country of moderate elevation (three or four hundred feet) which the violent lash of the whole of the Southern Ocean was always acting upon and undermining. Their rock formation consisted of various strata, the upper crust or surface being an oolitic limestone ; below this is an indented concrete mixture of sand, soil, small pebbles, and shells ; beneath this appear immense masses of a coarse greyish limestone, of which by far the greater portion of the cliffs are

composed; and immediately below these again is a narrow stripe of a whitish, or rather a cream-coloured substance, lying in horizontal strata, but which the impracticable nature of the cliffs did not permit me to examine. After riding for forty-five miles along their summits, I was in no instance able to descend; their brinks were perfectly steep and overhanging, and in many places enormous masses appeared severed by deep cracks from the main land, and requiring but a slight touch to plunge them into the abyss below. As far as I have yet been along these cliffs, I have seen nothing in their appearance to lead me to suppose that any portion of them is composed of chalk. Immediately along their summits, and for a few hundred yards back, very numerous pieces of pure flint are lying loosely scattered upon the surface of the limestone. How they obtained so elevated a position, or whence they are from, may admit, perhaps, of some speculation. Back from the sea, and as far as the eye could reach, the country was level and generally open, with some low prickly bushes and salsolaceous plants growing upon it; here and there patches of the gum scrub shewed themselves, and among which a few small grassy openings were interspersed. The whole of this tract was thickly covered by small land shells, about the size of snail shells—and some of them somewhat resembling those in shape. There were no sudden depressions or abrupt elevations anywhere; neither hills, trees, or water were to be observed; nor was there the least indication of improvement or change in the general character of this desolate and forbidding region. The natives we met with at the head of the Bight were very friendly, and readily afforded us every information we required—as far as we could make them comprehend our wishes.

"We most distinctly understood from them, that there was no water along the coast, westerly, for ten of their days' journeys; and that inland, there was neither fresh nor salt water, hills or timber, as far as they had ever been; an account which but too well agreed with the opinion I had myself formed, upon ascertaining that the same dreary, barren region I had been traversing

so long, still continued at a point where I had ever looked forward to some great and important change taking place in the features of the country, and from which I had hoped I might eventually have accomplished the object for which the expedition was fitted out. Such, however, was not the case; there was not any improvement in the appearance of the country, or the least indication that there might be a change for the better, within any practicable distance. I had already examined the tract of country from the longitude of Adelaide, to the parallel of almost 130° E. longitude; an extent comprising nearly 8½ degrees of longitude; without my having found a single point from which it was possible to penetrate far into the interior; and I now find myself in circumstances of so embarrassing and hopeless a character, that I have most reluctantly been compelled to give up all further idea of contending with obstacles which there is no reasonable hope of ever overcoming. I have now, therefore, with much regret completely broken up my small but devoted party. Two of my men returned to Adelaide in the *Waterwitch*, five weeks ago.

"Mr. Scott and another of my men proceed on Monday in the *Hero;* whilst myself, my native boys, and the overseer (who has chosen to accompany me) proceed hence overland to King George's Sound, as soon as our horses are a little recruited by the abundant supply of forage we received by the *Hero*.

"In this undertaking, my young friend Mr. Scott—with his usual spirit and perseverance—was most anxious to have joined me; but painful as it has been to refuse, I have felt it my duty, from the nature of the service, not to comply with his request. It now only remains for me to return my most sincere thanks to the many friends to whose kindness I have been so much indebted during the continuance of this long and anxious undertaking. To his Excellency the Governor I feel that I can never be sufficiently grateful for the very kind, prompt, and liberal support and encouragement which I have invariably experienced, and to which I have been mainly indebted for the means of accomplishing even the little I have done. To yourself, as chairman,

the committee, and the colonists, by whom the expedition was fitted out, I return my most sincere acknowledgments for the very great honour done me in appointing me to the command of an undertaking at once so interesting and important—for the liberal and kind way in which I have been supported, and my wishes complied with; and, above all, for the flattering and encouraging confidence expressed in my abilities and perseverance. To a conviction of the existence of this confidence in the minds of those by whom I was appointed, I feel that I owe much of the stimulus that has sustained and encouraged me under difficulties and disappointments of no ordinary kind. Deeply as I lament the unsuccessful and unsatisfactory result of an undertaking from which so much was expected, I have the cheering consciousness of having endeavoured faithfully to discharge the trust confided to me; and although from a concurrence of most unfortunate circumstances which no human prudence could foresee or guard against, and which the most untiring perseverance has been unable to surmount, I have not succeeded in effecting the great objects for which this expedition was fitted out, I would fain hope that our labours have not been altogether in vain, but that hereafter, some future and more fortunate traveller, judging from the considerable extent of country we have examined, and the features it has developed, may, by knowing where the interior is not practicable, be directed to where it is.

"In concluding my report of our endeavours to penetrate the northern interior, I beg to express to all who have been connected with the expedition, my sincere thanks for their zeal and good conduct. In my young friend, Mr. Scott, I have had a cheerful companion and useful assistant; whilst in my overseer and men, I have met with a most praiseworthy readiness and steadiness of conduct, under circumstances and disappointments that have at once been trying and disheartening.

"I have the honour to be, Sir, your most obedient servant,

"EDWARD JOHN EYRE.

"*The Chairman of the Committee for promoting the Northern Expedition.*"

We were now alone, myself, my overseer, and three native boys, with a fearful task before us, the bridge was broken down behind us, and we must succeed in reaching King George's Sound, or perish; no middle course remained. It was impossible for us to be insensible to the isolated and hazardous position we were in; but this very feeling only nerved and stimulated us the more in our exertions, to accomplish the duty we had engaged in; the result we humbly left to that Almighty Being who had guided and guarded us hitherto, amidst all our difficulties, and in all our wanderings, and who, whatever he might ordain, would undoubtedly order every thing for the best.

Our time was now entirely taken up, in the daily routine of the camp, attending to the sheep and horses, and in making preparations for our journey. We had a large supply of corn and bran sent for our horses, and as long as any of this remained, I determined to continue in depôt.

In the mean time, the overseer was thoroughly occupied in preparing pack-saddles, (all of which we had to make) extra bridles, new hobbles, and in shoeing all the horses. I undertook the duty of new stuffing and repairing the various saddles, making what extra clothes were required for myself and the native boys for our journey; weighing out and packing in small linen bags, all the rations of tea, sugar, &c. which would be required weekly, preparing strong canvas saddle-bags, making light

oilskins to protect our things from the wet, &c. &c. These many necessary and important preparations kept us all very busy, and the time passed rapidly away. On one occasion, I attempted with one of my native boys, to explore the country due north of Fowler's Bay, but the weather turned out unfavourable, the wind being from the north-east, and scorchingly hot; I succeeded, however, in penetrating fully twenty miles in the direction I had taken, the first ten of which was through a dense heavy scrub, of the Eucalyptus dumosa, or the tea-tree. Emerging from this, we entered an open pretty looking country, consisting of grassy plains of great extent, divided by belts of shrubs and bush; as we advanced the shrubs became less numerous, the country more open, and salsolaceous plants began to occupy the place of the grass. Had we been able to continue our exploration for another day's journey, I have no doubt, from the change which appeared gradually to be taking place as we advanced north, that the whole country around would have been one vast level open waste, without bush or shrub of any kind, and covered by salsolæ. I felt strongly convinced, we were gradually approaching a similar kind of country to that I had been in between Lake Torrens and Flinders range; the only difference was that as far as we had yet gone from Fowler's Bay, the elevation of the country did not appear to have been diminished; its average height above the level of the sea, I judged to be about 300 feet, and forming doubt-

less a continuation of the table land, I had found existing at the head of the Great Bight. The weather, however, was as unfavourable as the country, for such researches, at this season of the year, and the horses I had taken out with me suffered a good deal, even in the short space of two days, during which I was engaged in this attempt.

On some occasions the thermometer was 113° in the shade, and whenever the wind was from the north-east, it was hot and oppressive beyond all conception. The natives, though occasionally seen, generally kept away from us during the time we were in depôt. One old man alone (called Mūmmă) came up to our camp, and remained with us for several days; he was one of the few who had accompanied us so far from the neighbourhood of Denial Bay, and seemed to have taken a great fancy to us. We now endeavoured to reward him for his former services, by giving him a red shirt, a blanket, and a tomahawk, and whenever we got our meals he joined us, eating and drinking readily any thing we gave him—tea, broth, pease soup, mutton, salt pork, rice, damper, sugar, dried fruits, were all alike to him, nothing came amiss, and he appeared to grow better in condition every day.

At last he too got tired of remaining so long in one place; the novelty had worn away, and packing up his things he left us. During the time this man had been with us, I took the opportunity of ascertaining whether the King George's Sound native, Wylie,

could understand him, but I found he could not. There were one or two words common to both, but the general character, meaning, and sound of the two languages were so very different upon comparison, that I could myself understand the old man much better than Wylie could.

Whilst remaining in depôt, the whole party were one day suddenly seized with a severe attack of illness, accompanied with vomiting and violent pain in the stomach, and I began to fear that we had unknowingly taken some deleterious ingredient in our food, as all were seized in the same way; this attack continued for several days, without our being able to discover the cause of it, but at last by changing the sugar we were using, we again got well. It appeared that a new bag of sugar had been broached about the time we were first attacked, and upon inspecting it, we found the bag quite wet--something or other of a deleterious character having been spilled over it, and which had doubtless caused us the inconvenience we experienced. Fortunately we had other sugar that had not been so injured, and the loss of the damaged bag was not of great consequence to us.

By the 23rd of February our preparations for entering upon our journey were nearly all completed, the horses had eaten up all their bran and corn, and were now in good condition; all our pack-saddles, saddles, and harness were ready, our provisions were all packed, and every thing in order

for commencing the undertaking; there remained but to bury our surplus stores, and for this the hole was already dug. On the afternoon of the 24th I intended finally to evacuate the depôt, and on the evening of the 23rd, to amuse my natives, I had all the rockets and blue-lights we had, fired off, since we could not take them with us, our pack-horses being barely able to carry for us the mere necessaries of life.

CHAPTER XV.

RETURN OF MR. SCOTT IN THE HERO—MR. SCOTT AGAIN SAILS FOR ADELAIDE—COMMENCE JOURNEY TO THE WESTWARD—OPPORTUNE ARRIVAL AT THE SAND-HILLS—LARGE FLIES—TAKE ON THE SHEEP—LEAVE THE OVERSEER WITH THE HORSES—REACH YEERKUMBAN KAUWE—JOINED BY THE OVERSEER—TORMENTING FLIES AGAIN—MOVE ON WITH THE SHEEP—LEAVE OVERSEER TO FOLLOW WITH THE HORSES—CHARACTER OF COUNTRY ALONG THE BIGHT—SCENERY OF THE CLIFFS—LEAVE THE SHEEP—ANXIETY ABOUT WATER—REACH THE TERMINATION OF THE CLIFFS—FIND WATER.

February 24.—This being the day I had appointed to enter upon the arduous task before me, I had the party up at a very early hour. Our loads were all arranged for each of the horses; our blankets and coats were all packed up, and we were in the act of burying in a hole under ground the few stores we could not take with us, when to our surprise a shot was heard in the direction of Fowler's Bay, and shortly after a second; we then observed two people in the distance following up the dray tracks leading to the depôt. Imagining that some whaler had anchored in the bay, and being anxious to prevent our underground store from being noticed, we hastily spread the tarpaulins over the hole, so that what we were about could not be observed, and then fired shots in reply.

As the parties we had seen gradually approached nearer I recognised one of them with the telescope as being Mr. Germain, the master of the Hero; the other I could not make out at first from his being enveloped in heavy pilot clothes; a little time however enabled me to distinguish under this guise my young friend Mr. Scott, and I went anxiously to meet him, and learn what had brought him back. Our greeting over, he informed me that the Governor had sent him back with letters to me, and desired me to return in the Hero to Adelaide. As Mr. Scott had not brought the letters up, I walked down with him after luncheon, and went on board the cutter, where I received many friendly letters, all urging me to return and give up the attempt I meditated to the westward, and which every one appeared to consider as little less than madness. From the Governor I received a kind letter to the same effect, offering to assist me in any further attempts I might wish to make round Lake Torrens, or to explore the Northern Interior, and placing absolutely at my disposal, within the colony, the services of the Hero, to enable me either to take my party back overland, or to follow out any examinations I might wish to make from the coast northerly. As a further inducement, and with a view to lessen the feelings of disappointment I might experience at the unsuccessful termination of an expedition from which such great results had been expected, the assistant commissioner had been instructed to write to me

officially, communicating the approbation of His Excellency and of the Colonists of the way in which I had discharged the trust confided to me, and directing me to relinquish all further attempts to the westward, and to return in the Hero to Adelaide.

Added to the numerous letters I received, were many friendly messages to the same effect, sent to me through Mr. Scott. I felt deeply sensible of the lively interest expressed in my welfare, and most grateful for the kind feeling manifested towards me on the part of the Governor and the Colonists; it was with much pain and regret, therefore, that I found myself unable to comply with their requests, and felt compelled by duty to adopt a course at variance with their wishes. When I first broke up my party and sent Mr. Scott back to Adelaide, on the 31st January, 1841, I had well and maturely considered the step I felt myself called upon to adopt; after giving my best and serious attention to the arguments of my friends, and carefully reconsidering the subject now, I saw nothing to induce me to change the opinion I had then arrived at.

It will be remembered, that in stating the origin and commencement of the Northern expedition, it was remarked, that a previously contemplated expedition to the Westward, was made to give way to it, and that I had myself been principally instrumental in changing the direction of public attention from the one to the other; it will be remembered also, what publicity had been given to our departure,

how great was the interest felt in the progress of our labours, and how sanguine were the expectations formed as to the results; alas, how signally had these hopes been dashed to the ground, after the toils, anxieties, and privations of eight months, neither useful nor valuable discoveries had been made; hemmed in by an impracticable desert, or the bed of an impassable lake, I had been baffled and defeated in every direction, and to have returned now, would have been, to have rendered of no avail the great expenses that had been incurred in the outfit of the expedition, to have thrown away the only opportunity presented to me of making some amends for past failure, and of endeavouring to justify the confidence that had been reposed in me, by carrying through the exploration which had been originally contemplated to the westward, now it was no longer possible to accomplish that to the north, for which it had given place; I considered myself in duty and in honour bound, not to turn back from this attempt, as long as there was the remotest possibility of success, without any regard to considerations of a personal or private nature. Under these feelings, therefore, I resolved to remain only another day in depôt, to reply to the letters I had received, and return my best thanks to the many friends who had expressed such kind interest on my behalf.

February 25.—Having finished my letters, and buried all the spare stores, I sent the native boys away

early with the sheep, that they might travel more slowly than we should do with the horses. About two we loaded the pack animals, and wishing Mr. Scott a final adieu, set off upon our route. The party consisted of myself, the overseer, three native boys, nine horses, one Timor pony, one foal, born at Streaky Bay, and six sheep; our flour which was buried at the sand-hills to the north-west, was calculated for nine weeks, at an allowance of six pounds of flour each weekly, with a proportionate quantity of tea and sugar. The long rest our horses had enjoyed, and the large supply of oats and bran we had received for them, had brought them round wonderfully, they were now in good condition, and strong, and could not have commenced the journey under more favourable circumstances, had it been the winter instead of the summer season.

Two of the native boys having gone on early in the morning with the sheep, there remained only myself, the overseer, and one native, to manage ten horses, and we were consequently obliged to drive some of the pack-horses loose; at first they went well and quietly, but something having unluckily startled one of them, he frightened the others, and four out of the number set off at full gallop, and never stopped for five miles, by which time they had got rid of all their loads except the saddles. Sending the black boy back to the depôt with the four horses that had not got away, I and the overseer went on horseback after the others,

picking up the baggage they had been carrying, scattered about in every direction; luckily no great damage was done, and at sunset we were all assembled again at the depôt, and the animals reloaded. Leaving a short note for Mr. Scott, who had gone on board the cutter, we again recommenced our journey, and, travelling for five miles, halted at the well in the plains. I intended to have made a long stage, but the night set in so dark that I did not like to venture amongst the scrub with the pack-horses now they were so fresh, and where, if they did get frightened and gallop off, they would cause us much greater trouble and delay than they had done in the daytime.

February 26.—Moving on very early, we arrived at the grassy plain under the sand-hills, a little after three in the afternoon, just in time to save the gun and clothes of the black boys, which they had imprudently left there whilst they took the sheep to water, a mile and a half away. At the very instant of our arrival, a native was prowling about the camp, and would, doubtless, soon have carried off every thing. Upon examining the place at which we had buried our flour on the 31st December, and upon which we were now dependent for our supply, I found that we had only just arrived in time to save it from the depredations of the natives; it seems, that having found where the cask containing it was buried, and being unable, from its weight, to get it out of the ground, they had broken a square

hole in one of the staves (by what means I could not discover), and though, as yet, every thing was safe and uninjured inside, I have no doubt, that, had we been one day later in coming, they would have enlarged the opening in the cask, and scattered or destroyed the contents, and we should have then had the unpleasant and laborious task of returning to that we had buried at Fowler's Bay for a fresh supply. A bucket, which we had also left buried, was broken to pieces, a two gallon keg carried off, and a twenty-five gallon cask full of water had been dug up, and the water drank or emptied, so that we were very fortunate in arriving when we did to prevent further loss.

The black boys, who had gone a-head with the sheep, returned soon after our arrival, tired and hungry, having only had one meal since they left us on the 25th. They had been over the sand-hills to fetch water, and were now coming to try and find the flour which they knew we had left buried at these plains. After dark, accompanied by the overseer, I took the horses down to the water, but the sand had slipped in, and we could not get them watered to-night.

February 27.—Sending the overseer and two boys down with the horses to the well this morning, I and the other boy set to work, and dug out the cask with the flour, which we then weighed out, and subdivided into packages of fifty pounds each, for the convenience of carrying. The native I had

seen about the camp, on our approach, yesterday, had returned, and slept near us at night; but upon inquiring from him this morning, where our two-gallon keg was, he took the very earliest opportunity of decamping, being probably afraid that we should charge him with the robbery, or punish him for it. The natives, generally, are a strange and singular race of people, and their customs and habits are often quite inexplicable to us. Sometimes, in barely passing through a country, we have them gathering from all quarters, and surrounding us, anxious and curious to observe our persons, or actions; at other times, we may remain in camp for weeks together without seeing a single native, though many may be in the neighbourhood; when they do come, too, they usually depart as suddenly as their visit had been unexpected. Among all who had come under my observation, hitherto, along this coast, I found that every male had undergone the singular ceremony I have described as prevailing in the Port Lincoln peninsula; each, too, had the cartilage of the nose perforated, but none had lost the front teeth, nor did I see any (with one exception) having scars raised on the back, breast, or arms, as is frequently the case with many tribes in Australia.

For the last few days, the weather had been tolerably cool, and we had not been much troubled with musquitoes; instead, however, we were persecuted severely by a very large greyish kind of horse-fly, with a huge proboscis for sucking up the blood.

These pests were in great numbers, and proved a sad annoyance, lighting upon us in every direction, and inflicting very irritating wounds even through clothes of considerable thickness.

February 28.—As we had a long distance to travel to the next water, and the sheep could not keep pace with the horses, I left the overseer and two natives to bring the latter after us, whilst I and the younger boy set off with the sheep. At fifteen miles, we passed the place where the nine-gallon keg of water had been buried on the 5th January. Upon digging it up, and taking out the bung, the water appeared discoloured and offensive in smell. It was still clear, however, and the sheep drank hastily of it, and we did the same ourselves, but the horses would not touch it. Leaving the cask out in the air with the bung out that it might sweeten a little against the overseer came up, we went on with the sheep to the undulating plains, arriving there between ten and eleven at night. After hobbling the horses, and making a brush-yard for the sheep, we laid down, tired with the labours of the day.

March 1.—Travelling through the plains for a mile, we came to our former encampment, where we had left some stores, and a large cask of water ; the latter had dried up to about two quarts, and was very horrible, both in smell and flavour ; but still we were glad to take it, for, calculating upon finding an abundance in this cask, we had imprudently

brought but little with us. After breakfast, I dug up some of the provisions buried here; and leaving a note for the overseer, proceeded onwards with the boy, and the sheep, for twenty-four miles. The stage was a long one, and over heavy gronnd, so that the sheep began to get tired, as we did ourselves also, one of us being always obliged to walk whilst the other was riding. We had two horses with us, but required one exclusively to carry our coats, blankets, and provisions, the other one we rode in turn.

March 2.—A hot day, with the wind north-east. Between eleven and twelve we arrived at the first water, at the head of the Bight, and had a long and arduous task to get the sheep and horses watered, no natives being here to help us now, and the sand rushing in as fast as we could throw it out. By great exertion we effected our object, and then getting some tea, and leaving a note to tell the overseer not to halt at this difficult watering-place, if he could possibly avoid it, we pushed on again, and took up our position at Yeerkumban kauwe, in time to dig holes, and water the sheep, before dark.

March 3.—Having got up and watered the horses and sheep, I sent the boy out to tend them at grass, whilst I commenced digging two large holes to water the pack-horses, that there might be no delay when the overseer came up with them. I had nothing but a shell to dig with, and, as a very large excavation was required to enable a bucket to be

dipped, my occupation was neither a light nor a short one. Having completed my work, I killed a sheep, well knowing the party would be fatigued and hungry, when they came up. About three they made their appearance, and thus, upon the whole, we had very successfully got over this our first push, and were soon very comfortably established at "Yeerkumban kauwe." The holes I had dug enabled us easily and speedily to water the horses, and the sheep I had killed afforded a refreshing meal to the overseer and boys, after their harassing journey. In the afternoon the sand blew about in a most annoying manner, covering us from head to foot, and filling everything we put down, if but for an instant. This sand had been our constant torment for many weeks past; condemned to live among the sand-hills for the sake of procuring water, we were never free from irritation and inconvenience. It floated on the surface of the water, penetrated into our clothes, hair, eyes, and ears, our provisions were covered over with it, and our blankets half buried when we lay down at nights,—it was a perpetual and never-ceasing torment, and as if to increase our miseries we were again afflicted with swarms of large horse-flies, which bit us dreadfully. On the 4th, we remained in camp to rest the horses, and I walked round to reconnoitre. Upon the beach I found the fragments of a wreck, consisting of part of a mast, a tiller wheel, and some copper sheathings, the last sad records of the fate of some unfortunate

vessel on this wild and breaker-beaten shore. There was nothing to indicate its size, or name, or the period when the wreck occurred.

No recent traces of natives having been either at Yeerkumban kauwe, or the more distant water, were visible anywhere, and I imagined they might perhaps have made an excursion to the westward. A large flight of red-winged cockatoos were seen to-day hovering around the sand-hills, and appearing quite disconcerted at finding us in possession of the water; we had not before seen them in the neighbourhood, and I can hardly conjecture where they go to from this place, for generally they are birds fond of water.

Knowing from the accounts of the natives that upon leaving Yeerkumban kauwe, I should have a task before me of no ordinary difficulty to get either the sheep or the horses to the next water, I determined to proceed myself in advance, with the sheep, that by travelling slowly, at the same time that we kept steadily advancing, every chance might be given to them of accomplishing the journey in safety. I was anxious too to precede my party, in order that by finding out where the water was, I might be on the look out for them, to guide them to it, and that thus when in their greatest difficulty, no time should be lost in searching for water. Having given the overseer orders to keep the tracks of my horses, when he had travelled about seventy miles along the coast, I set off on the 7th March, with

the youngest of the natives to assist me in driving the sheep, leaving the two elder ones with the overseer, to aid in managing the pack-horses. As before we took two horses with us, one to carry our provisions and water, and the other to ride upon in turn, the boy however, being young, and incapable of much fatigue, the greater portion of the walking naturally fell to my share. The day was cool and favourable, and we accomplished a stage of twenty-four miles; the afternoon became dark and lowering, and I fully expected rain, but towards sunset two or three drops fell, and the clouds cleared away. Our horses fed tolerably upon the little withered grass that we found, but the sheep were too tired to eat, and lay down; we put them therefore into a yard we had made for them for the night.

March 8.—Having turned the sheep out of the yard three hours before daylight, I was in hopes they would have fed a little before we moved on, but they would not touch such food as we had for them, and at six I was obliged to proceed onwards; the morning was dark and looked like rain, but as was the case yesterday, a drop or two only fell. We made a stage to-day of twenty-six miles, through a level country, generally open, but near the sea covered with a very low dwarf tea-tree, small prickly bushes, and salsolæ, and having the surface almost every where sprinkled over with fresh-water shells; further from the coast the plains extending to the north were very extensive, level, and divided by belts of scrub or shrubs.

There was no perceptible inclination of the country in any direction, the level land ran to the very borders of the sea, where it abruptly terminated, forming the steep and precipitous cliffs, observed by Captain Flinders, and which it was quite impossible to descend anywhere. The general elevation of this table land, was from three to four hundred feet.

The day turned out fine and clear, and the effect produced by refraction in these vast plains was singular and deceptive: more than once we turned considerably out of our way to examine some large timber, as we thought it to be, to the north of us, but which, upon our approach, proved to be low scrubby bushes. At another time we imagined we saw two natives in the distance, and went towards them as carefully and cautiously as we could; instead, however, of our having seen the heads of natives, as we supposed, above the bushes, it turned out to be only crows. Yet the native boy, whose quickness and accuracy of vision had often before surprised me, was equally deceived with myself. Upon halting in the evening our sheep again were very tired, and refused to eat. The horses too were now beginning to feel the want of water, and fed but little. I therefore sat up and watched them until half past eight, after which I tied them up to some bushes. At one o'clock I again got up and let them loose, hoping they might feed a little better in the cool of the night. The scud was rapidly passing the moon, and I watched for hours the clouds

gathering to the south and passing to the north, but no rain fell.

March 9.—Moving on early we passed through a similar country to that we had before traversed; but there was more of the tea-tree scrub, which made our travelling more difficult and fatiguing. This kind of scrub, which is different from any I had seen before, is a low bush running along the ground, with very thick and crooked roots and branches, and forming a close matted and harassing obstacle to the traveller. The sheep and horses got very tired, from having to lift their legs so high to clear it every step they took. To the westward we found the country rising as we advanced, and the cliffs becoming higher; they now answered fully, where we could obtain a view of any projecting parts, to the description given by Flinders—"the upper part brown and the lower part white;" but as yet we could not find any place where we could descend to examine them. The lower, or white part, appeared soft and crumbling, and its decay had left the upper, or harder rock, fearfully overhanging the ocean. Upon the summits we again found flints in the greatest abundance lying loosely scattered over the surface.

The day was cloudy and gathering for rain, but none fell. After travelling twenty-five miles we halted for an hour or two to rest the sheep and horses, feeding was out of the question, for they were too much in want of water to attempt to eat the dry

and withered grass around us. We now lay down to rest ourselves, and the boy soon fell asleep; I was however feverish and restless, and could not close my eyes. In an hour and a half I arose, got up the horses and saddled them, and then, awaking my companion, we again pushed on by moonlight. At ten miles we crossed a well beaten native pathway, plainly discernible even then, and this we followed down towards the cliffs, fully hoping it would lead to water. Our hopes however had been excited but to render our disappointment the greater, for upon tracing it onwards we found it terminate abruptly at a large circular hole of limestone rock, which would retain a considerable quantity of water after rains, but was now without a single drop. Gloomily turning away we again pushed on for eight miles further, and at three in the morning of the 10th were compelled to halt from downright exhaustion and fatigue. The horses and sheep were knocked up. The poor boy was so tired and sleepy that he could scarcely sit upon his horse, and I found myself actually dosing as I walked: mechanically my legs kept moving forwards, but my eyes were every now and then closed in forgetfulness of all around me, until I was suddenly thrown down by getting entangled amongst the scrub, or aroused by a severe blow across the face from the recoil of a bough after the passage of the boy's horse. I now judged we had come about ninety-three miles from Yeerkum-ban-kauwe, and hoped that we could not be very far

from water. Having tied up the horses for an hour or two, and without making a fire, or even unrolling our cloaks to cover us, we stretched ourselves on the ground, and were in a few moments fast asleep.

March 10.—At five we were again on our route, every moment expecting to see a break in the line of cliffs along which we had now travelled so far. Alas! they still continued stretching as far as the eye could see to the westward, and as fast as we arrived at one point which had bounded our vision (and beyond which we hoped a change might occur), it was but to be met with the view of another beyond. Distressing and fatal as the continuance of these cliffs might prove to us, there was a grandeur and sublimity in their appearance that was most imposing, and which struck me with admiration. Stretching out before us in lofty unbroken outline, they presented the singular and romantic appearance of massy battlements of masonry, supported by huge buttresses, and glittering in the morning sun which had now risen upon them, and made the scene beautiful even amidst the dangers and anxieties of our situation. It was indeed a rich and gorgeous view for a painter, and I never felt so much regret at my inability to sketch as I did at this moment.

Still we kept moving onwards and still the cliffs continued. Hour after hour passed away, mile after mile was traversed, and yet no change was observable. My anxiety for the party who were to follow behind with the pack-horses became very

great; the state of doubt and uncertainty I was in was almost insupportable, and I began to fear that neither sheep nor horses would ever reach the water, even should we suceeed in doing so ourselves, which now appeared to be very doubtful. At noon I considered we had come one hundred and ten miles from the last water, and still the country remained the same. The cliffs indeed appeared to be gradually declining a little in elevation to the westward, but there was nothing to indicate their speedy termination. Our sheep still travelled, but they were getting so tired, and their pace was so slow, that I thought it would be better to leave them behind, and by moving more rapidly with the horses endeavour at least to save their lives. Foreseeing that such a contingency as this might occur, I had given the overseer strict orders to keep the tracks of my horses, that if I should be compelled to abandon the sheep he might find them and bring them on with his party.

Having decided upon this plan we set to work and made a strong high yard of such shrubs as we could find, and in this we shut up the sheep. I then wrote a note for the overseer, directing him to bury the loads of the horses, and hastening on with the animals alone endeavour to save their lives. To attract attention I raised a long stick above the sheep-yard, and tied to it a red handkerchief, which could be seen a long way off. At one we again proceeded, and were able to advance more rapidly than

we could whilst the sheep were with us. In a few miles we came to a well-beaten native road, and again our hopes were raised of speedily terminating the anxiety and suspense we were in. Following the road for ten miles it conducted us to where the cliffs receded a little from the sea, leaving a small barren valley between them and the ocean, of low, sandy ground; the road ceased here at a deep rocky gorge of the cliffs, where there was a breach leading down to the valley. There were several deep holes among the rocks where water would be procurable after rains, but they were now all dry. The state of mind in which we passed on may be better imagined than described. We had now been four days without a drop of water for our horses, and we had no longer any for ourselves, whilst there appeared as little probability of our shortly procuring it as there had been two days ago. A break, it is true, had occurred in the line of the cliffs, but this appeared of a very temporary character, for we could see beyond them the valley again abutting upon the ocean.

At dark we were fifteen miles from where we left the sheep, and were again upon a native pathway, which we twice tried to follow down the steep and rugged slopes of the table land into the valley below. We were only, however, fagging our poor horses and bewildering ourselves to no purpose, for we invariably lost all track at the bottom, and I at last became convinced that it was useless to try and

trace the natives' roadway further, since it always appeared to stop at rocky holes where there was no water now. Keeping, therefore, the high ground, we travelled near the top of the cliffs, bounding the sandy valley, but here again a new obstacle impeded our progress. The country, which had heretofore been tolerably open was now become very scrubby, and we found it almost impossible either to keep a straight course, or to make any progress through it in the dark. Still we kept perseveringly onwards, leading our horses and forcing our way through in the best way we could. It was, however, all in vain; we made so little headway, and were so completely exhausting the little strength we had left, that I felt compelled to desist. The poor boy was quite worn out, and could scarcely move. I was myself but little better, and we were both suffering from a parching thirst; under such obstacles labour and perseverance were but thrown away, and I determined to await the day-light. After tying up the horses the boy lay down, and was soon asleep, happy in his ignorance of the dangers which threatened him. I lay down, too, but not to sleep; my own distresses were lost in the apprehensions which I entertained for those who were behind. We were now about one hundred and twenty-eight miles from the last water; we had been four whole days and nights without a drop for our horses, and almost without food also, (for parched as they were they could not feed upon the dry and withered

grass we found.) The state the poor animals were in was truly pitiable, what then was likely to be the condition of those that were coming after us, and carrying heavy packs. It was questionable, even, if they would reach the distance we had already attained in safety; and it was clear, that unless I discovered water early in the morning, the whole of our horses must perish, whilst it would be very doubtful if we could succeed even in saving our own lives.

March 11.—Early this morning we moved on, leading slowly our jaded animals through the scrub. The night had been one of painful suspense and gloomy forebodings; and the day set in dark and cloudy, as if to tantalise us with the hope of rain which was not destined to fall. In a few miles we reached the edge of the cliffs, from which we had a good view of the sandy valley we had been travelling round, but which the thick scrub had prevented our scrutinising sooner. I now noticed some hillocks of bare sand in the midst of it. These I had not seen before, as the only previous point from which they could have been visible had been passed by us in the dark. It now struck me, that the water spoken of by the natives at Yeerkumban-kauwe might be situated among these sand-hills, and that we were going away from instead of approaching it. The bare idea of such a possibility was almost maddening, and as the dreadful thought flashed across my mind I stood for a moment undecided and irresolute as to

what I ought to do. We were now many miles past these hills, and if we went back to examine them for water, and did not find it, we could never hope that our horses would be able to return again to search elsewhere; whilst if there was water there, and we did not return, every step we took would but carry us further from it, and lead to our certain destruction.

For a few minutes I carefully scanned the line of coast before me. In the distance beyond a projecting point of the cliffs, I fancied I discerned a low sandy shore, and my mind was made up at once, to advance in the line we were pursuing. After a little while, we again came to a well beaten native pathway, and following this along the summit of the cliffs, were brought by it, in seven miles, to the point where they receded from the sea-shore; as they inclined inland, leaving a low sandy country between them and some high bare sand-hills near the sea. The road now led us down a very rocky steep part of the cliffs, near the angle where they broke away from the beach, but upon reaching the bottom we lost it altogether on the sandy shore; following along by the water's edge, we felt cooled and refreshed by the sea air, and in one mile and a half from where we had descended the cliffs, we reached the white sand-drifts. Upon turning into these to search for water, we were fortunate enough to strike the very place where the natives had dug little wells; and thus on the fifth day of our sufferings, we were

again blessed with abundance of water,—nor could I help considering it as a special instance of the goodness of Providence, that we had passed the sandy valley in the dark, and had thereby been deterred from descending to examine the sand-hills it contained; had we done so, the extra fatigue to our horses and the great length of time it would have taken up, would probably have prevented the horses from ever reaching the water we were now at. It took us about two hours to water the animals, and get a little tea for ourselves, after which the boy laid down to sleep, and I walked round to search for grass. A little grew between the sand-drifts and the cliffs, and though dry and withered, I was most thankful to find it. I then returned to the camp and laid down, but could not sleep, for although relieved myself, my anxiety became but the greater, for the party behind, and the more so, because at present I could do nothing to aid them; it was impossible that either the horses, or ourselves, could go back to meet them without a few hours' rest, and yet the loss of a few hours might be of the utmost consequence; I determined, however, to return and meet them as early as possible in the morning, and in the mean time, as I knew that the overseer and natives would, when they came, be greatly fatigued, and unable to dig holes to water the horses, I called up the boy, and with his assistance dug two large holes about five feet deep, from which the horses could readily and without delay be watered upon their arrival. As

we had only some shells left by the natives to work with, our wells progressed slowly, and we were occupied to a late hour. In the evening we watered the horses, and before laying down ourselves, drove them to the grass I had discovered. For the first time for many nights, I enjoyed a sound and refreshing sleep.

CHAPTER XVI.

GO BACK TO MEET THE OVERSEER—PARTY ARRIVE AT THE WATER—LONG ENCAMPMENT—GEOLOGICAL FORMATION OF THE CLIFFS—MOVE ON AGAIN—DIG FOR WATER—TRACES OF NATIVES—SEND BACK FOR WATER—PARROTS SEEN—COOL WINDS FROM NORTH-EAST—OVERSEER RETURNS—CONTINUE THE JOURNEY—ABANDON BAGGAGE—DENSE SCRUBS—DRIVEN TO THE BEACH—MEET NATIVES—MODE OF PROCURING WATER FROM ROOTS.

March 12.—THE first streak of daylight found us on our way to meet the party, carrying with us three gallons of water upon one of the horses, the other was ridden by the boy. Upon passing the sandy valley, where I had been in such a state of suspense and doubt at seeing the sand-hills behind me, I determined to descend and examine them; but before doing so, I wrote a note for the overseer (in case he should pass whilst I was in the valley,) and hoisted a red handkerchief to attract his attention to it.

I was unsuccessful in my search for water; but whilst among the sand-hills, I saw the party slowly filing along the cliffs above the valley, and leaving the boy to look about a little longer, I struck across to meet them. Both horses and people I found greatly fatigued, but upon the whole, they had got through the difficulty better than I had anticipated;

after leaving a great part of the loads of the pack-horses about seventeen miles back, according to the written instructions I had left. The sheep, it seemed, had broken out of the yard and travelled backwards, and were picked up by the overseer, twelve miles away from where we had left them; as they had got very tired and were delaying the horses, he left one of the natives, this morning, to follow slowly with them, whilst he pushed on with the pack-horses as rapidly as they could go. After giving him the pleasing intelligence that his toil was nearly over for the present, and leaving some few directions, I pushed on again with the boy, who had not found the least sign of water in the valley, to meet the native with the sheep. In about three miles we saw him coming on alone without them, he said they were a mile further back, and so tired they could not travel. Halting our horses, I sent him to bring them on, and during his absence, had some tea made and dinner prepared for him. When the sheep came up they were in sad condition, but by giving them water and a few hours rest, they recovered sufficiently to travel on in the evening to the water.

At night, the whole party were, by God's blessing, once more together, and in safety, after having passed over one hundred and thirty-five miles of desert country, without a drop of water in its whole extent, and at a season of the year the most unfavourable for such an undertaking. In accomplish-

ing this distance, the sheep had been six and the horses five days without water, and both had been almost wholly without food for the greater part of the time. The little grass we found was so dry and withered, that the parched and thirsty animals could not eat it after the second day. The day following our arrival at the water was one of intense heat, and had we experienced such on our journey, neither men nor horses could ever have accomplished it; most grateful did we feel, therefore, to that merciful Being who had shrouded us from a semi-tropical sun, at a time when our exposure to it would have ensured our destruction.

From the 12th to the 18th we remained at the sand-drifts, during which time we were engaged in attending to the horses, in sending back to recover the stores that had been left by the overseer, and in examining the country around. The natives had told me that there were two watering places at the termination of the cliffs to the eastward, and that these were situated in a somewhat similar manner to those at the head of the Great Bight. We were encamped at one, and I made several ineffectual attempts to find the other during the time the horses were recruiting. The traces of natives near us were numerous, and once we saw their fires, but they did not shew themselves at all. The line of cliffs which had so suddenly turned away from the sea, receded inland from eight to ten miles, but still running parallel with the coast; between it and the

sea the country was low and scrubby, with many beds of dried up salt lakes; but neither timber nor grass, except the little patch we were encamped at. Above the cliffs the appearance of the country was the same as we had previously found upon their summits, with, perhaps, rather more scrub; pigeons were numerous at the sand-hills, and several flocks of red-crested and red-winged cockatoos were hovering about, watching for an opportunity to feast upon the red berries I have before spoken of, and which were here found in very great abundance, and of an excellent quality. The sand, as usual at our encampments, was a most dreadful annoyance, and from which we had rarely any respite. The large flies were also very numerous, troublesome and irritating tormentors. They literally assailed us by hundreds at a time, biting through our clothes, and causing us constant employment in endeavouring to keep them off. I have counted twenty-three of these blood-suckers at one time upon a patch of my trousers eight inches square.

Being now at a part of the cliffs where they receded from the sea, and where they had at last become accessible, I devoted some time to an examination of their geological character. The part that I selected was high, steep, and bluff towards the sea, which washed its base; presenting the appearance described by Captain Flinders, as noted before. By crawling and scrambling among the crags, I managed, at some risk, to get at these singular

cliffs. The brown or upper portion consisted of an exceedingly hard, coarse grey limestone, among which some few shells were embedded, but which, from the hard nature of the rock, I could not break out; the lower or white part consisted of a gritty chalk, full of broken shells and marine productions, and having a somewhat saline taste: parts of it exactly resembled the formation that I had found up to the north, among the fragments of table-land; the chalk was soft and friable at the surface, and easily cut out with a tomahawk, it was traversed horizontally by strata of flint, ranging in depth from six to eighteen inches, and having varying thicknesses of chalk between the several strata. The chalk had worn away from beneath the harder rock above, leaving the latter most frightfully overhanging and threatening instant annihilation to the intruder. Huge mis-shapen masses were lying with their rugged pinnacles above the water, in every direction at the foot of the cliffs, plainly indicated the frequency of a falling crag, and I felt quite a relief when my examination was completed, and I got away from so dangerous a post.

I have remarked that the natives at the head of the Great Bight had intimated to us, that there were two places where water might be found in this neighbourhood, not far apart, and as with all our efforts we had only succeeded in discovering one, I concluded that the other must be a little further along the coast to the westward; in this supposition

I was strengthened, by observing that all the native tracks we had met with apparently took this direction. Under this impression I determined to move slowly along the coast until we came to it, and in order that our horses might carry no unnecessary loads, to take but a few quarts of water in our kegs.

On the 18th we moved on, making a short stage of fourteen miles, through a heavy, sandy, and scrubby country. At first I tried the beach, but finding the sand very loose and unsuitable for travelling, I was again compelled to enter the scrub behind the sea-shore ridge, travelling through a succession of low scrubby undulations, with here and there the beds of dried up lakes The traces of natives were now more recent and numerous, but found principally near the bushes bearing the red berries, and which grew behind the front ridge of the coast in the greatest abundance. From this circumstance, and from our having now travelled a considerable distance beyond the first water, I began to fear that the second which had been spoken of by the natives must, if it existed at all, be behind us instead of in advance, and that in reality the fruit we saw, and not water, was the object for which the natives, whose tracks were around us, were travelling to the westward. The day was cloudy, and likely for rain, but after a few drops had fallen, the clouds passed away. In the afternoon the overseer dug behind the sand-ridge, and at six feet came to water, but perfectly salt.

March 19.—To-day we travelled onwards for twenty-six miles, through a country exactly similar to that we had passed through yesterday. At three in the afternoon we halted at an opening where there was abundance of grass, though dry and withered. The indications of natives having recently passed still continued, and confirmed me in my impression, that they were on a journey to the westward, and from one distant water to another, and principally for the purpose of gathering the fruit. We were now forty miles from the last water, and I became assured that we had very far to go to the next; I had for some time given over any hope of finding the second water spoken of by the natives at the head of the Bight, and considered that we must have passed it if it existed, long ago, perhaps even in that very valley, or among those very sand-hills where we had searched so unsuccessfully on the 12th. There was now the prospect of a long journey before us without water, as we had brought only a little with us for ourselves, and which was nearly exhausted, whilst our horses had been quite without, and were already suffering from thirst. Consulting with the overseer, I resolved to leave our baggage where we were, whilst the horses were sent back to the water (forty miles) to rest and recruit for three or four days; by this means I expected they would gather strength, and as they would have but little weight to carry until they reached our present position, when they returned

we should be better able to force a passage through the waste before us, at the same time that we should be able to procure a fresh and larger stock of water for ourselves. At midnight I sent the whole party back to the last water, but remained myself to take care of the baggage and sheep. I retained an allowance of a pint of water per day for six days, this being the contemplated period of the overseer's absence. My situation was not at all enviable, but circumstances rendered it unavoidable.

From the departure of my party, until their return, I spent a miserable time, being unable to leave the camp at all. Shortly after the party left, the sheep broke out of the yard, and missing the horses with which they had been accustomed to travel and to feed, set off as rapidly as they could after them; I succeeded in getting them back, but they were exceedingly troublesome and restless, attempting to start off, or to get down to the sea whenever my eye was off them for an instant, and never feeding quietly for ten minutes together; finding at last that they would be quite unmanageable, I made a very strong and high yard, and putting them in, kept them generally shut up, letting them out only to feed for two or three hours at once. This gave me a little time to examine my maps, and to reflect upon my position and prospects, which involved the welfare of others, as well as my own. We had still 600 miles of country to traverse, measured in straight lines across the chart; but taking into account the

inequalities of the ground, and the circuit we were frequently obliged to make, we could not hope to accomplish this in less than 800 miles of distance. With every thing in our favour we could not expect to accomplish this in less than eight weeks; but with all the impediment and embarrassments we were likely to meet with, it would probably take us twelve. Our sheep were reduced to three in number, and our sole stock of flour now amounted to 142 pounds, to be shared out amongst five persons, added to which the aspect of the country before us was disheartening in the extreme; the places at which there was any likelihood of finding water were probably few and far apart, and the strength of our horses was already greatly reduced by the hardships they had undergone. Ever since we had left Fowler's Bay, the whole party, excepting the youngest boys, had been obliged chiefly to walk, and yet every care and precaution we could adopt were unable to counteract the evil effects of a barren country, and an unfavourable season of the year. The task before us was indeed a fearful one, but I firmly hoped by patience and perseverance, safely and successfully to accomplish it at last.

During nearly the whole time that my party were away the weather was cool and cloudy. Occasionally there was a great deal of thunder and lightning, accompanied by a few drops of rain, but it always cleared away without heavy showers. The storms came up from seawards, and generally passed inland

to the north-east; which struck me as being somewhat singular, especially when taken in conjunction with the fact that on one or two occasions, when the wind was from the north-east, it was comparatively cool, and so unlike any of those scorching blasts we had experienced from the same quarter when on the western side of the Great Bight. There was another thing connected with my present position which equally surprised me, and was quite as inexplicable: whilst engaged one morning rambling about the encampment as far as I could venture away, I met with several flights of a very large description of parrot, quite unknown to me, coming apparently from the north-east, and settling among the shrubs and bushes around. They had evidently come to eat the fruit growing behind the sand-hills, but being scared by my following them about, to try and shoot one, they took wing and went off again in the direction they had come from.

Several days had now elapsed since the departure of the overseer with the horses, and as the time for their return drew nigh I became anxious and restless. The little stock of water left me was quite exhausted. It had originally been very limited, but was reduced still further by the necessity I was under of keeping it in a wooden keg, where it evaporated, and once or twice by my spilling some. At last, on the 25th, I was gratified by seeing my party approach. They had successfully accomplished their mission, and brought a good supply of water

for ourselves, but the horses looked weary and weak, although they had only travelled fourteen miles that day. After they had rested a few hours I broke up the encampment, and travelling for fourteen miles further over a scrubby country, came to a patch of grass, at which we halted early. From the nature of the country, and the consequent embarrassment it entailed upon us, it was impossible for any of the party to have any longer even the slight advantage formerly enjoyed of occasionally riding for a few miles in turn; all were now obliged to walk, except the two youngest boys, who were still permitted to ride at intervals. The weather was cloudy, and showers were passing to the north-east.

March 26.—Upon moving on this morning we passed through the same wretched kind of country for eighteen miles, to an opening in the scrub where was a little grass, and at which we halted to rest. There was so much scrub, and the sandy ridges were so heavy and harassing to the horses, that I began to doubt almost if we should get them along at all. We were now seventy-two miles from the water, and had, in all probability, as much further to go before we came to any more, and I saw that unless something was done to lighten the loads of the pack-animals (trifling as were the burdens they carried) we never could hope to get them on. Leaving the natives to enjoy a sleep, the overseer and I opened and re-sorted all our baggage, throwing away every thing that we could at all dispense with; our great

coats, jackets, and other articles of dress were thrown away; a single spare shirt and pair of boots and socks being all that were kept for each, besides our blankets and the things we stood in, and which consisted only of trowsers, shirt, and shoes. Most of our pack-saddles, all our horse-shoes, most of our kegs for holding water, all our buckets but one, our medicines, some of our fire-arms, a quantity of ammunition, and a variety of other things, were here abandoned. Among the many things that we were compelled to leave behind there was none that I regretted parting with more than a copy of Captain Sturt's Expeditions, which had been sent to me by the author to Fowler's Bay to amuse and cheer me on the solitary task I had engaged in; it was the last kind offering of friendship from a highly esteemed friend, and nothing but necessity would have induced me to part with it. Could the donor, however, have seen the miserable plight we were reduced to, he would have pitied and forgiven an act that circumstances alone compelled me to.

After all our arrangements were made, and every thing rejected that we could do without, I found that the loads of the horses were reduced in the aggregate about two hundred pounds; but this being divided among ten, relieved each only a little. Myself, the overseer, and the King George's Sound native invariably walked the whole way, but the two younger natives were still permitted to ride alternately upon one of the strongest horses. As our

allowance of flour was very small, and the fatigue and exertion we were all obliged to undergo very great, I ordered a sheep to be killed before we moved on again. We had been upon short allowance for some time, and were getting weak and hardly able to go through the toils that devolved upon us. Now, I knew that our safety depended upon that of our horses, and that their lives again were contingent upon the amount of fatigue we were ourselves able to endure, and the degree of exertion we were capable of making to relieve them in extremity. I did not therefore hesitate to make use of one of our three remaining sheep to strengthen us for coming trials, instead of retaining them until perhaps they might be of little use to us. The whole party had a hearty meal, and then, watching the horses until midnight, we moved on when the moon rose.

During the morning we had passed along an extensive dried-up salt swamp behind the coast ridge, which was soft for the horses in some places, but free from that high brush which fatigued them so much, and which now appeared to come close in to the sea, forming upon the high sandy ridges a dense scrub. The level bank of the higher ground, or continuation of the cliffs of the Bight, which had heretofore been distinctly visible at a distance of ten or twelve miles inland, could no longer be seen : it had either merged in the scrubby and sandy elevations around us, or was hid by them from our view.

March 27.—During the night we travelled slowly

over densely scrubby and sandy ridges, occasionally crossing large sheets of oolitic limestone, in which were deep holes that would most likely retain water after rains, but which were now quite dry. As the daylight dawned the dreadful nature of the scrub drove us to the sea beach; fortunately it was low water, and we obtained a firm hard sand to travel over, though occasionally obstructed by enormous masses of sea-weed, thrown into heaps of very many feet in thickness and several hundreds of yards in length, looking exactly like hay cut and pressed ready for packing.

To-day we overtook the natives, whose tracks we had seen so frequently on our route. There was a large party of them, all busily engaged in eating the red berries which grew behind the coast ridge in such vast quantities; they did not appear so much afraid of us as of our horses, at which they were dreadfully alarmed, so that all our efforts to communicate with them were fruitless; they would not come near us, nor would they give us the opportunity of getting near them, but ran away whenever I advanced towards them, though alone and unarmed. During the route I frequently ascended high scrubby ridges to reconnoitre the country inland, but never could obtain a view of any extent, the whole region around appeared one mass of dense impenetrable scrub running down to the very borders of the ocean.

After travelling twenty miles I found that our horses needed rest, and halted for an hour or two

during the heat of the day, though without grass, save the coarse wiry vegetation that binds the loose sands together, and without even bushes to afford them shade from the heat, for had we gone into the scrub for shelter we should have lost even the wretched kind of grass we had.

At half past two we again moved onwards, keeping along the beach, but frequently forced by the masses of sea-weed to travel above high water mark in the heavy loose sand. After advancing ten miles the tide became too high for us to continue on the shore, and the scrub prevented our travelling to the back, we were compelled therefore to halt for the night with hardly a blade of grass for our horses. I considered we were now one hundred and two miles from the last water, and expected we had about fifty more to go to the next; the poor animals were almost exhausted, but as the dew was heavy they were disposed to eat had there been grass of any kind for them. The overseer and I as usual watched them alternately, each taking the duty for four hours and sleeping the other four; to me this was the first sleep I had had for the last three nights.

Whilst in camp, during the heat of the day, the native boys shewed me the way in which natives procure water for themselves, when wandering among the scrubs, and by means of which they are enabled to remain out almost any length of time, in a country quite destitute of surface water. I had often heard of the natives procuring water from the roots

of trees, and had frequently seen indications of their having so obtained it, but I had never before seen the process actually gone through. Selecting a large healthy looking tree out of the gum-scrub, and growing in a hollow, or flat between two ridges, the native digs round at a few feet from the trunk, to find the lateral roots; to one unaccustomed to the work, it is a difficult and laborious thing frequently to find these roots, but to the practised eye of the native, some slight inequality of the surface, or some other mark, points out to him their exact position at once, and he rarely digs in the wrong place. Upon breaking the end next to the tree, the root is lifted, and run out for twenty or thirty feet; the bark is then peeled off, and the root broken into pieces, six or eight inches long, and these again, if thick, are split into thinner pieces; they are then sucked, or shaken over a piece of bark, or stuck up together in the bark upon their ends, and water is slowly discharged from them; if shaken, it comes out like a shower of very fine rain. The roots vary in diameter from one inch to three; the best are those from one to two and a half inches, and of great length. The quantity of water contained in a good root, would probably fill two-thirds of a pint. I saw my own boys get one-third of a pint out in this way in about a quarter of an hour, and they were by no means adepts at the practice, having never been compelled to resort to it from necessity.

Natives who, from infancy, have been accus-

tomed to travel through arid regions, can remain any length of time out in a country where there are no indications of water. The circumstance of natives being seen, in travelling through an unknown district, is therefore no proof of the existence of water in their vicinity. I have myself observed, that no part of the country is so utterly worthless, as not to have attractions sufficient occasionally to tempt the wandering savage into its recesses. In the arid, barren, naked plains of the north, with not a shrub to shelter him from the heat, not a stick to burn for his fire (except what he carried with him), the native is found, and where, as far as I could ascertain, the whole country around appeared equally devoid of either animal or vegetable life. In other cases, the very regions, which, in the eyes of the European, are most barren and worthless, are to the native the most valuable and productive. Such are dense brushes, or sandy tracts of country, covered with shrubs, for here the wallabie, the opossum, the kangaroo rat, the bandicoot, the leipoa, snakes, lizards, iguanas, and many other animals, reptiles, birds, &c., abound; whilst the kangaroo, the emu, and the native dog, are found upon their borders, or in the vicinity of those small, grassy plains, which are occasionally met with amidst the closest brushes.

CHAPTER XVII.

HORSES BEGIN TO KNOCK UP—COMPELLED TO FOLLOW ROUND THE BEACH—TIMOR PONY UNABLE TO PROCEED—GLOOMY PROSPECTS—OVERSEER BEGINS TO DESPOND—TWO MORE HORSES LEFT BEHIND — FRAGMENTS OF WRECKS — WATER ALL CONSUMED — COLLECT DEW — CHANGE IN CHARACTER OF COUNTRY—DIG A WELL—PROCURE WATER—NATIVE AND FAMILY VISIT US—OVERSEER GOES BACK FOR BAGGAGE—DISASTROUS TERMINATION OF HIS JOURNEY—SITUATION AND PROSPECTS OF THE PARTY.

March 28.—At daylight we moved on, every one walking, even the youngest boy could not ride now, as the horses were so weak and jaded. Soon after leaving the camp, one of them laid down, although the weight upon his back was very light; we were consequently obliged to distribute the few things he carried among the others, and let him follow loose. Our route lay along the beach, as the dense scrub inland prevented us from following any other course; we had, therefore, to go far out of our way, tracing round every point, and following along every bay, whilst the sea-weed frequently obstructed our path, and drove us again to the loose sands, above high water mark, causing extra fatigue to our unfortunate horses. At other times we were forced to go between these banks of sea-weed and the sea,

into the sea itself, on which occasions it required our utmost vigilance to prevent the wretched horses from drinking the salt water, which would inevitably have destroyed them. In order to prevent this we were obliged to walk ourselves in the water, on the sea-side of them, one of the party being in advance, leading one horse, another being behind to keep up the rear, and the other three being at intervals along the outside of the line, to keep them from stopping for an instant until the danger was past.

We had scarcely advanced six miles from our last night's camp when the little Timor pony I had purchased at Port Lincoln broke down completely; for some time it had been weak, and we were obliged to drive it loose, but it was now unable to proceed further, and we were compelled to abandon it to a miserable and certain death, that by pushing on, we might use every exertion in our power to relieve the others, though scarcely daring to hope that we could save even one of them. It was, indeed, a fearful and heart-rending scene to behold the noble animals which had served us so long and so faithfully, suffering the extremity of thirst and hunger, without having it in our power to relieve them. Five days of misery had passed over their heads since the last water had been left, and one hundred and twelve miles of country had been traversed without the possibility of procuring food for them, other than the dry and sapless remains of last year's grass, and this but rarely to be met with. No rains

had fallen to refresh them, and they were reduced to a most pitiable condition, still they travelled onwards, with a spirit and endurance truly surprising. Whenever we halted, they followed us about like dogs wherever we went, appearing to look to us only for aid, and exhibiting that confidence in us which I trust we all reposed in the Almighty, for most truly did we feel, that in His mercy and protection alone our safety could now ever be hoped for.

About ten o'clock the tide became too high for us to keep the beach, and we were compelled to halt for some hours. Our horses were nearly all exhausted, and I dreaded that when we next moved on many of them would be unable to proceed far, and that, one by one, they would all perish, overcome by sufferings which those, who have not witnessed such scenes, can have no conception of. We should then have been entirely dependent upon our own strength and exertions, nearly midway between Adelaide and King George's Sound, with a fearful country on either side of us, with a very small supply of provisions, and without water.

The position we were in, frequently forced sad forebodings with respect to the future, and though I by no means contemplated with apathy the probable fate that might await us, yet I was never for a moment undecided as to the plan it would be necessary to adopt, in such a desperate extremity—at all hazards, I was determined to proceed onwards.

The country we had already passed through, precluded all hope of our recrossing it without the horses to carry water for us, and without provisions to enable us to endure the dreadful fatigue of forced marches, across the desert. The country before us was, it is true, quite unknown, but it could hardly be worse than that we had traversed, and the chance was that it might be better. We were now pushing on for some sand-hills, marked down in Captain Flinders' chart at about 126½° of east longitude; I did not expect to procure water until we reached these; but I felt sure we should obtain it on our arrival there. After this point was passed, there appeared to be one more long push without any likelihood of procuring water, as the cliffs again became the boundary of the ocean; but beyond Cape Arid, the change in the character and appearance of the country, as described by Flinders, indicated the existence of a better and more practicable line of country than we had yet fallen in with.

My overseer, however, was now unfortunately beginning to take up an opposite opinion, and though he still went through the duty devolving upon him with assiduity and cheerfulness, it was evident that his mind was ill at ease, and that he had many gloomy anticipations of the future. He fancied there were no sand-hills ahead, that we should never reach any water in that direction, and that there was little hope of saving any of the horses. In this latter idea I rather encouraged him than

otherwise, deeming it advisable to contemplate the darker side of the picture, and by accustoming ourselves to look forward to being left entirely dependent upon our own strength and efforts, in some measure to prepare ourselves for such an event, should it unfortunately befal us. In conversing with him upon our prospects, and the position we should be in if we lost all our horses, I regretted extremely to find that his mind was continually occupied with thoughts of returning, and that he seemed to think the only chance of saving our lives, would be to push on to the water ourselves, and then endeavour again to return to Fowler's Bay, where we had buried a large quantity of provisions. Still it was a gratification to find that the only European with me, did not altogether give way to despondency, and could even calmly contemplate the prospect before us, considering and reasoning upon the plan it might be best to adopt, in the event of our worst forebodings being realized. In discussing these subjects, I carefully avoiding irritating or alarming him, by a declaration of my own opinions and resolutions, rather agreeing with him than otherwise, at the same time, that I pointed out the certain risk that would attend any attempt to go back to Fowler's Bay, and the probability there was of much less danger attending the effort to advance to King George's Sound. With respect to the native boys, they appeared to think or care but little about the future; they were not sensible of their danger, and

having something still to eat and drink, they played and laughed and joked with each other as much as ever.

Whilst waiting for the tide to fall, to enable us to proceed, the overseer dug a hole, and we buried nearly every thing we had with us, saddles, fire-arms, ammunition, provisions; all things were here abandoned except two guns, the keg with the little water we had left, and a very little flour, tea and sugar. I determined to relieve our horses altogether from every weight (trifling as was the weight of all we had), and by pushing, if possible, on to the water, endeavour to save their lives; after which we could return for the things we had abandoned. Our arrangements being completed, we all bathed in the sea, ate a scanty meal, and again moved onwards at half past two o'clock.

The poor horses started better than could have been expected, but it was soon evident that all were fast failing, and many already quite exhausted. At six miles my favourite mare could no longer keep up with the rest, and we were obliged to let her drop behind. Her foal, now six months old, we got away with some difficulty from her, and kept it with the other horses; at four miles further another of the horses failed, and I had him tied up, in the hope that if we reached water during the evening, I might send back and recover him.

Towards dark we all imagined we saw a long point stretching to the S. W. and backed by high

sandy looking cones. We hoped that these might be the sand-hills we were pushing for, and our hearts beat high with hope once more. It, however, soon become too dark to discern anything, and at fourteen miles from where we had halted in the morning, we were again obliged by the tide to encamp for the night, as the country behind the shore was densely scrubby, and quite impracticable as a line of route. It was nine o'clock when we halted, and we were all very tired, and our feet somewhat inflamed, from getting so frequently wet with the salt water, whilst endeavouring to keep the horses from it; there was no grass but the coarse, wiry kind that bound the sand together, of this the poor animals cropped a little, as a very heavy dew fell, and served to moisten it. As usual, the overseer and myself kept watch upon the horses at night, whilst the natives enjoyed their undisturbed repose. Two of the boys were young, and none of the three had their frame and muscles sufficiently developed to enable them to undergo the fatigue of walking during the day if deprived of their rest at night; still the duty became very hard upon two persons, where it was of constant occurrence, and superadded to the ordinary day's labour.

March 29.—After calling up the party, I ascended the highest sand-hill near me, from which the prospect was cheerless and gloomy, and the point and sandy cones we imagined we had seen last night had vanished. Indeed, upon examining the chart,

and considering that as yet we had advanced only one hundred and twenty-six miles from the last water, I felt convinced that we had still very far to go before we could expect to reach the sand-drifts. The supply of water we had brought for ourselves was nearly exhausted, and we could afford none for breakfast to-day; the night, however, had been cool, and we did not feel the want of it so much. Upon moving, I sent one of the natives back to the horse I had tied up, about four miles from our camp to try to bring him on to where we should halt in the middle of the day.

For ten miles we continued along the beach until we came to a bluff rocky ridge, running close into the sea; here we rested until the tide fell, and to give the native boy an opportunity of rejoining us, which he did soon after, but without the horse; the poor animal had travelled about eight miles with him from the place where we had left him, but had then been unable to come any further, and he abandoned him.

Whilst the party were in camp, I sent the overseer to a distant point of land to try and get a view of the coast beyond; but upon his return, after a long walk, he told me his view to the west was obstructed by a point similar to the one I had sent him to. During the day, we had passed a rather recent native encampment, where were left some vessels of bark for holding water, or for collecting it from the roots of trees, or the grass. Near where we halted

in the middle of the day, the foot-prints of the natives were quite fresh, and shewed that they were travelling the same way as ourselves.

For the last two or three days, we had passed many pieces of wreck upon the beach, oars, thwarts of boats, fragments of masts, spars, &c. strewed about in every direction; none of them, however, appeared to have been recently deposited there, and many of the oars, and lighter spars, were stuck up on their ends in the sand above high water mark, probably so placed by the natives, but with what object I know not. One oar was stuck up upon a high sand ridge, some distance from the shore, and I spent some time in examining the place, in the vain hope that it might be an indication of our vicinity to water.

In the afternoon we all had a little tea; and after a bathe in the sea, again moved onwards; fortunately the beach was firm and hard, and the evening cool; the horses advanced slowly and steadily, and in a way that quite surprised me. After travelling for thirteen miles, we encamped under the coast ridge late in the evening, all very much exhausted, having made several ineffectual searches for water, among the sandy ridges, as we passed along.

In our route along the shore, we had seen immense numbers of fish in the shallow waters, and among the reefs lying off the coast; several dead ones had been picked up, and of these the boys

made a feast at night. Our last drop of water was consumed this evening, and we then all lay down to rest, after turning the horses behind the first ridge of the coast, as we could find no grass; and neither the overseer nor I were able to watch them, being both too much worn out with the labours of the day, and our exertions, in searching for water.

March 30.—Getting up as soon as the day dawned, I found that some of the horses had crossed the sand ridge to the beach, and rambled some distance backwards. I found, too, that in the dark, we had missed a patch of tolerable grass among the scrub, not far from our camp. I regretted this the more, as during the night a very heavy dew had fallen, and the horses might perhaps have fed a little.

Leaving the overseer to search for those that had strayed, I took a sponge, and went to try to collect some of the dew which was hanging in spangles upon the grass and shrubs; brushing these with the sponge, I squeezed it, when saturated, into a quart pot, which, in an hour's time, I filled with water. The native boys were occupied in the same way; and by using a handful of fine grass, instead of a sponge, they collected about a quart among them. Having taken the water to the camp, and made it into tea, we divided it amongst the party, and never was a meal more truly relished, although we all ate the last morsel of bread we had with us, and none knew when we might again enjoy either a drink of water, or a mouthful of bread. We had now demonstrated

the practicability of collecting water from the dew. I had often heard from the natives that they were in the habit of practising this plan, but had never before actually witnessed its adoption. It was, however, very cold work, and completely wet me through from head to foot, a greater quantity of water by far having been shaken over me, from the bushes, than I was able to collect with my sponge. The natives make use of a large oblong vessel of bark, which they hold under the branches, whilst they brush them with a little grass, as I did with the sponge; the water thus falls into the trough held for it, and which, in consequence of the surface being so much larger than the orifice of a quart pot, is proportionably sooner filled. After the sun once rises, the spangles fall from the boughs, and no more water can be collected; it is therefore necessary to be at work very early, if success is an object of importance.

The morning was very hazy, and at first nothing could be seen of the country before us; but as the mist gradually cleared away a long point was seen to the south-west, but so very distant that I felt certain our horses never would get there if it lay between us and the water. To our astonishment they kept moving steadily along the beach, which was tolerably firm near the sea, in which were many reefs and shelves of rocks, covered with muscles below low water mark. As we progressed it was evident that the country was undergoing a considerable change;

the sea shore dunes and the ridges immediately behind them were now of a pure white sand, and steep, whilst those further back were very high and covered with low bushes. Upon ascending one of the latter I had a good view around, and to my inexpressible pleasure and relief saw the high drifts of sand we were looking for so anxiously, in the corner between us and the more distant point of land first seen. The height of the intervening ridges and the sand-drifts being in the angle prevented us from noticing them sooner.

We had now travelled ten miles, and the sand-hills were about five miles further. The horses were, however, becoming exhausted, and the day was so hot that I was compelled to halt, and even now, in sight of our long-expected goal, I feared we might be too late to save them. Leaving the boys to attend to the animals, I took the overseer up one of the ridges to reconnoitre the country for the purpose of ascertaining whether there was no place near us where water might be procured by digging. After a careful examination a hollow was selected between the two front ridges of white sand, where the overseer thought it likely we might be successful. The boys were called up to assist in digging, and the work was anxiously commenced; our suspense increasing every moment as the well was deepened. At about five feet the sand was observed to be quite moist, and upon its being tasted was pronounced quite free from any saline qualities. This was joyous

news, but too good to be implicitly believed, and though we all tasted it over and over again, we could scarcely believe that such really was the case. By sinking another foot the question was put beyond all doubt, and to our great relief fresh water was obtained at a depth of six feet from the surface, on the seventh day of our distress, and after we had travelled one hundred and sixty miles since we had left the last water. Words would be inadequate to express the joy and thankfulness of my little party at once more finding ourselves in safety, and with abundance of water near us. A few hours before hope itself seemed almost extinguished, and those only who have been subject to a similar extremity of distress can have any just idea of the relief we experienced. The mind seemed to have been weighed down by intense anxiety and over-wrought feelings. At first the gloomy restlessness of disappointment or the feverish impatience of hope had operated upon our minds alternately, but these had long since given way to that calm settled determination of purpose, and cool steady vigour of action which desperate circumstances can alone inspire. Day by day our prospects of success had gradually diminished; our horses had become reduced to so dreadful a state that many had died, and all were likely to do so soon; we ourselves were weak and exhausted by fatigue, and it appeared impossible that either could have gone many miles further. In this last extremity we had been relieved. That gra-

cious God, without whose assistance all hope of safety had been in vain, had heard our earnest prayers for his aid, and I trust that in our deliverance we recognized and acknowledged with sincerity and thankfulness his guiding and protecting hand. It is in circumstances only such as we had lately been placed in that the utter hopelessness of all human efforts is truly felt, and it is when relieved from such a situation that the hand of a directing and beneficent Being appears most plainly discernible, fulfilling those gracious promises which he has made, to hear them that call upon him in the day of trouble.*

As soon as each had satisfied his thirst the pots were filled and boiled for tea, and some bread was baked, whilst the overseer and natives were still increasing the size of the well to enable us to water the horses. We then got a hasty meal that we might the better go through the fatigue of attending to the suffering animals. Our utmost caution now became necessary in their management; they had been seven days without a drop of water, and almost

* "When the poor and needy seek water, and there is none, and their tongue faileth for thirst, I the Lord will hear them, I the God of Israel will not forsake them."

"I will open rivers in high places, and fountains in the midst of the valleys: I will make the wilderness a pool of water, and the dry land springs of water."—Isa. xli. 17, 18.

"I will even make a way in the wilderness, and rivers in the desert."—Isa. xliii. 19.

without food also, and had suffered so much that with abundance of water near us, and whilst they were suffering agonies from the want of it, we dared not give it to them freely. Having tied them up to some low bushes, we gave each in turn about four gallons, and then driving them away for half a mile to where there was a little withered grass, we watched them until the evening, and again gave each about four gallons more of water.

Whilst thus engaged, a very fine looking native with his wife and family, passed us and halted for a few moments to observe us, and procure a drink from the well we had made. This man did not seem at all alarmed, and made signs that he was going to sleep, a little further along the coast, where there was also water, pointing to the white sand-hills about five miles from us. The language he spoke seemed to be the same as that of the other natives we had met with along the Great Bight, nor did the King George's Sound native understand him a bit better than he had done the others.

At night one of our two remaining sheep was killed, and the overseer and myself proceeded to watch the horses for the night. The poor creatures were scarcely able to crawl, yet were restless and uneasy, and fed but little, they had tasted water and they were almost mad for it, so that it was a severe task to both myself and the overseer to keep them from returning to the well. The single sheep now left had also given us a good deal of trouble, it was

frightened at being alone, and frustrated all our efforts to yard it, preferring to accompany and remain with the horses,—an arrangement we were obliged to acquiesce in.

March 31.—The morning broke wild and lowering, and the sand blew fearfully about from the drifts among which the water was. Our well had tumbled in during the night, and we had to undergo considerable labour before we could water the horses. After clearing it out, we gave each of them seven gallons, and again sent them away to the grass, letting the native boys watch them during the day, whilst we rested for a few hours, shifted our camp to a more sheltered place, weighed out a week's allowance of flour at half a pound each per day, and made sundry other necessary arrangements.

Fearful of losing our only remaining sheep, if left to wander about, we made a strong yard to put it into at nights, for a long time, however, we could not get it to go near the yard, and only succeeded at last by leading in a horse first, behind which it walked quite orderly.

April 1.—The last night had been bitterly cold and frosty, and as we were badly clad, and without the means of making a large or permanent fire, we all felt acutely the severity of the weather. After breakfast, I left the overseer and natives to clear out the well, which had again fallen in, and water the horses, whilst I walked five miles along the beach to the westward, and then turned inland to examine

the sand-drifts there and search for grass. Behind the drifts I found some open sandy plains, with a coarse kind of dry grass upon them, and as they were not far from where the natives had dug wells for water, I thought the place might suit us to encamp at for a time when we left our present position. In returning to the camp, through the scrub behind the coast, I shot a fine wallabie, and saw several others; but having only cartridges with me, I did not like to cut up the balls for ammunition.

April 2.—Another severe cold frosty night made us fully sensible that the winter was rapidly closing in upon us, notwithstanding the ill-provided and unprotected state we were in to encounter its inclemencies. Our well had again tumbled in, and gave us a good deal of trouble, besides, each successive clearing out deepened it considerably, and this took us to a level where the brackish water mixed with the fresh; from this cause the water was now too brackish to be palatable, and we sunk another well apart from that used for the horses, at which to procure any water we required for our own use. During the afternoon I shot a wallabie behind the camp, but the place being densely scrubby, and the animal not quite dead, I did not get it.

On the 3rd, I sent the overseer out in one direction and I went myself out in another, to examine the country and try to procure wallabies for food. We both returned late, greatly fatigued with walking through

dense scrubs and over steep heavy sand ridges, but without having fired a shot.

Our mutton (excepting the last sheep) being all used on the 4th, we were reduced to our daily allowance of half a pound of flour each, without any meat.

On the 5th, the overseer and one of the native boys got ready to go back for some of the stores and other things we had abandoned, forty-seven miles away. As they were likely to have severe exercise, and to be away for four days, I gave them five pounds extra of flour above their daily allowance, together with the wallabie which I had shot, and which had not yet been used; they drove before them three horses to carry their supply of water, and bring back the things sent for.

As soon as they were gone, with the assistance of the two native boys who were left, I removed the camp to the white sand-drifts, five miles further west. Being anxious to keep as near to the grass as I could, I commenced digging at some distance away from where the natives procured their water, but at a place where there were a great many rushes. After sinking to about seven feet, I found the soil as dry as ever, and removing to the native wells, with some little trouble opened a hole large enough to water all the horses. The single sheep gave us a great deal of trouble and kept us running about from one sand hill to another, until we were tired out, before we could capture it; at last we succeeded, and I tied

him up for the night, resolved never to let him loose again.

In the evening I noticed the native boys looking more woe-begone and hungry than usual. Heretofore, since our mutton was consumed, they had helped out their daily half-pound of flour, with the roasted roots of the gum-scrub, but to-day they had been too busy to get any, and I was obliged to give to each a piece of bread beyond the regular allowance. It was pitiable to see them craving for food, and not to have the power of satisfying them; they were young and had large appetites, and never having been accustomed to any restraint of this nature, scarcity of food was the more sensibly felt, especially as they could not comprehend the necessity that compelled us to hoard with greater care than a miser does his gold, the little stock of provisions which we yet had left.

April 6.—The severe frost and intense cold of last night entirely deprived me of sleep, and I was glad when the daylight broke, though still weary and unrefreshed. After clearing out the well, and watering the horses, I sent one of the boys out to watch them, and gave the other the gun to try and shoot a wallabie, but after expending the only two charges of slugs I had left, he returned unsuccessful. At night we all made up our supper with the bark of the young roots of the gum-scrub. It appears to be extensively used for food by the natives in this district, judging from the remnants

left at their encamping places. The bark is peeled off the young roots of the eucalyptus dumosa, put into hot ashes until nearly crisp, and then the dust being shaken off, it is pounded between two stones and ready for use. Upon being chewed, a farinaceous powder is imbibed from between the fibres of the bark, by no means unpleasant in flavour, but rather sweet, and resembling the taste of malt; how far a person could live upon this diet alone, I have no means of judging, but it certainly appeases the appetite, and is, I should suppose, nutritious.

April 7.—Another sleepless night from the intense cold. Upon getting up I put a mark upon the beach to guide the overseer to our camp on his return, then weighed out flour and baked bread for the party, as I found it lasted much better when used stale than fresh. I tried to shoot some pigeons with small gravel, having plenty of powder but no shot. My efforts were, however, in vain, for though I several times knocked them over, and tore feathers out, I killed none. The day being very clear, I ascended the highest sand-hill to obtain a view of what had appeared to us to be a long point of land, stretching to the south-west. It was now clearly recognisable as the high level line of cliffs forming the western boundary of the Great Bight, and I at once knew, that when we left our present position, we could hope for no water for at least 140 or 150 miles beyond.

The weather on the 8th and 9th suddenly became

mild and soft, with the appearance of rain, but none fell. I was becoming anxious about the return of my overseer and native boy, who had been absent nine tides, when they ought to have returned in eight, and I could not help fearing some mischance had befallen them, and frequently went backwards and forwards to the beach, to look for them. The tenth tide found me anxiously at my post on the look out, and after watching for a long time I thought I discerned some dark objects in the distance, slowly advancing; gradually I made out a single horse, driven by two people, and at once descended to meet them. Their dismal tale was soon told. After leaving us on the 5th, they reached their destination on the 7th; but in returning one of the horses became blind, and was too weak to advance further, when they had barely advanced thirteen miles; they were consequently obliged to abandon him, and leave behind the things he had been carrying. With the other two horses they got to within five miles of the place we first procured water at on the 30th March. Here a second horse had become unable to proceed, and the things he had carried were also obliged to be left behind. They then got both horses to the first well at the sand-hills and watered them, and after resting a couple of hours came on to join me. Short as this distance was, the jaded horse could not travel it, and was left behind a mile and a half back. Having shewn the overseer and boy the camp, I sent the other two natives

to fetch up the tired horse, whilst I attended to the other, and put the solitary sheep in for the night. By a little after dark all was arranged, and the horse that had been left behind once more with the others.

From the overseer I learnt, that during the fifty miles he had retraced our route to obtain the provisions we had left, he had five times dug for water: four times he had found salt water, and once he had been stopped by rock. The last effort of this kind he had made not far from where we found water on the 30th of March, and I could not but be struck with the singular and providential circumstance of our first halting and attempting to dig for water on that day in all our distress, at the very first place, and at the only place, within the 160 miles we had traversed, where water could have been procured. It will be remembered, that in our advance, we had travelled a great part of the latter portion of this distance by night, and that thus there was a probability of our having passed unknowingly some place where water might have been procured. The overseer had now travelled over the same ground in daylight, with renovated strength, and in a condition comparatively strong, and fresh for exertion. He had dug wherever he thought there was a chance of procuring water, but without success in any one single instance.

After learning all the particulars of the late unlucky journey, I found that a great part of the things

I had sent for were still thirty-eight miles back, having only been brought twelve miles from where they had originally been left; the rest of the things were ten miles away, and as nearly all our provisions, and many other indispensable articles were among them, it became absolutely necessary that they should be recovered in some way or other, but how that was to be accomplished was a question which we could not so easily determine. Our horses were quite unfit for service of any kind, and the late unfortunate attempt had but added to the difficulties by which we were surrounded, and inflicted upon us the additional loss of another valuable animal. Many and anxious were the hours I spent in contemplating the circumstances we were in, and in revolving in my mind the best means at our command to extricate ourselves from so perilous a situation. We were still 650 miles from King George's Sound, with an entirely unknown country before us. Our provisions, when again recovered, would be barely sufficient to last us for three weeks and a half, at a very reduced rate of allowance. Our horses were jaded and miserable beyond all conception; they could literally scarcely crawl, and it was evident they would be unable to move on again at all without many days' rest where we were. On the other hand we had still the prospect of another of those fearful pushes without water to encounter, as soon as we left our present encampment, and had first to recover the provisions and other things yet

so far away. Nothing could be more disheartening than our situation, and it was also one in which it was difficult to decide what was best to be done. Aware that a single false step would now be fatal to us all, I saw that our circumstances required promptness and decision. With every thing depending upon my sole judgment, and the determination I arrived at, I felt deeply and anxiously the overwhelming responsibility that devolved upon me.

We were now about half way between Fowler's Bay and King George's Sound, located among barren sand-drifts, and without a drop of water beyond us on either side, within a less distance than 150 miles. Our provisions were rapidly decreasing, whilst we were lying idle and inactive in camp; and yet it would be absolutely necessary for us thus to remain for some time longer, or at once abandon the horses, and endeavour to make our way without them. To the latter, however, there were many objections, one of which was, that I well knew from the experience we had already had, that if we abandoned the horses, and had those fearful long distances to travel without water, we never could accomplish them on foot, if compelled at the same time to live upon a very low diet, to carry our arms, ammunition, and provisions, and in addition to these, a stock of water, sufficient to last six or seven days. The only thing that had enabled us to get through so far on our journey in safety, had been the having the horses with us, for though weak and jaded, they had yet

carried the few things, which were indispensable to us, and which we never could have carried ourselves under the circumstances.

There was another inducement to continue with the horses, which had considerable weight with me, and however revolting the idea might be at first, it was a resource which I foresaw the desperate circumstances we were in must soon compel us to adopt. It was certainly horrible to contemplate the destruction of the noble animals that had accompanied us so far, but ere long I well knew that such would be the only chance of saving our own lives, and I hoped that by accustoming the mind to dwell upon the subject beforehand, when the evil hour did arrive, the horror and disgust would be in some degree lessened. Upon consulting the overseer, I was glad to find that he agreed with me fully in the expediency of not abandoning the horses until it became unavoidable, and that he had himself already contemplated the probability of our being very shortly reduced to the alternative of using them for food.

It remained now only to decide, which way we would go when we agan moved on, whether to prosecute our journey to the Sound, or try to retrace our steps to Fowler's Bay. On this point my own opinion never wavered for an instant. My conviction of the utter impossibility of our ever being able to recross the fearful country we had passed through with such difficulty, under circumstances so much

more favourable than we were now in, was so strong that I never for a moment entertained the idea myself. I knew the many and frightful pushes without water we should have to make in any such attempt, and though the country before us was unknown, it could not well be worse than that we had passed through, whilst the probability was, that after the first long stage was accomplished, and which would take us beyond the western boundary of the Great Bight, we should experience a change in the character of the country, and be able to advance with comparative ease and facility. Unhappily my overseer differed from me in opinion upon this point.

The last desperate march we had made, had produced so strong an impression upon his mind, that he could not divest himself of the idea that the further we went to the westward the more arid the country would be found, and that eventually we should all perish from want of water; on the other hand, the very reduced allowance of food we were compelled to limit ourselves to, made his thoughts always turn to the depôt at Fowler's Bay, where we had buried a large supply of provisions of all kinds. In vain I pointed out to him the certain difficulties we must encounter in any attempt to return, the little probability there was of a single horse surviving even the first of those dreadful stages we should have to make, and the utter impossibility of

our getting successfully through without the horses; and, on the other hand, the very cheering prospect there was of all our most serious difficulties being terminated as soon as we had turned the western extremity of the Bight (to accomplish which, would not occupy more than six or seven days at the furthest when we moved on,) and the strong hopes that we might then reasonably entertain of falling in with some vessel, sealing or whaling upon the coast, and from which we might obtain a fresh supply of provisions. All my arguments were fruitless. With the characteristic obedience and fidelity with which he had ever served me, he readily acquiesced in any plan I might decide upon adopting; but I perceived, with pain, that I could not convince him that the view I took was the proper one, and that the plan I intended to follow was the only one which held out to us even the remotest hopes of eventual safety and success.

Finding that I made little progress in removing his doubts on the question of our advance, I resolved to pursue the subject no further, until the time for decision came, hoping that in the interim, his opinions and feelings might in some degree be modified, and that he might then accompany me cheerfully. The important and pressing duty of recovering at once the stores we had left behind, now claimed my attention. The overseer, with his usual anxiety to save me from any extra labour, kindly

offered to attempt this object again; but as he had just returned from a severe, though unfortunately unsuccessful journey for the same purpose, I decided upon doing it myself, and at once made my preparations for leaving the camp.

CHAPTER XVIII.

GO BACK WITH A NATIVE—SPEAR STING-RAYS — RECOVER THE BAGGAGE — COLD WEATHER — OVERSEER RECONNOITRES THE CLIFFS — UNFAVOURABLE REPORT — DIFFERENCE OF OPINION AS TO BEST PLANS FOR THE FUTURE —KILL A HORSE FOR FOOD — INJURIOUS EFFECTS FROM MEAT DIET—NATIVE BOYS BECOME DISAFFECTED — THEY STEAL PROVISIONS—NATIVE BOYS DESERT THE PARTY— THEY RETURN ALMOST STARVED—PARTY PROCEED ONWARDS TO THE WESTWARD — CLIFFS OF THE BIGHT — COUNTRY BEHIND THEM — THREATENING WEATHER — MURDER OF THE OVERSEER.

April 10.—Four days' provisions having been given to each of the party, I took the King George's Sound native with me to retrace, on foot, our route to the eastward. For the first ten miles I was accompanied by one of the other native boys, leading a horse to carry a little water for us, and take back the stores the overseer had buried at that point, when the second horse knocked up with him on the morning of the 9th. Having found the things, and put them on the horse, I sent the boy with them back to the camp, together with a large sting-ray fish which he had speared in the surf near the shore. It was a large, coarse, ugly-looking thing, but as it seemed to be of the same family as the skate, I did not imagine we should run any risk in eating it.

In other respects, circumstances had broken through many scruples and prejudices, and we were by no means particular as to what the fish might be, if it were eatable.

Having buried our little keg of water until our return, the King George's Sound native and myself pushed on for five miles further, and then halted for the night, after a day's journey of fifteen miles. We now cooked some sting-ray fish (for the native with me had speared a second one,) and though it was coarse and dry, our appetites had been sharpened by our walk, and we thought it far from being unpalatable.

April 11.—Moving away long before daylight, we pushed steadily on, and about dusk arrived, after a stage of twenty-three miles, at the place where our stores were. I found a much greater weight here than I expected, and feared it would be quite impossible for us to carry the whole away. By the light of the fire, I threw out saddles, clothes, oil-skins, &c. that we did not absolutely require, and packing up the remainder, weighed a bundle of thirty-two pounds for myself to carry, and one of twenty-two for the native, who also had a gun to take. Our arrangements being completed for the morrow, we enjoyed our supper of sting-ray, and lay down for the night.

April 12.—To-day the weather was cloudy and sultry, and we found it very oppressive carrying the weight we had with us, especially as we had no

water. By steady perseverance, we gained the place where our little keg had been buried; and having refreshed ourselves with a little tea, again pushed on for a few miles to a place where I had appointed the overseer to send a native to meet us with water. He was already there, and we all encamped together for the night, soon forgetting, in refreshing sleep, the fatigues and labours of the day.

The 13th was a dark cloudy day, with light rains in the morning. About noon we arrived at the camp, after having walked seventy-six miles in the last three days and a half, during great part of which, we had carried heavy weights. We had, however, successfully accomplished the object for which we had gone, and had now anxieties only for our future progress, the provisions and other stores being all safely recovered.

During my absence, I had requested the overseer to bake some bread, in order that it might be tolerably stale before we used it. To my regret and annoyance, I found that he had baked one third of our whole supply, so that it would be necessary to use more than our stated allowance, or else to let it spoil. It was the more vexing, to think that in this case the provisions had been so improvidently expended, from the fact of our having plenty of the sting-ray fish, and not requiring so much bread.

April 14.—Early this morning I sent the overseer, and one of the native boys, with three days'

provision to the commencement of the cliffs to the westward, visible from the sand-hills near our camp, in order that they might ascertain the exact distance they were from us, and whether any grass or water could be procured nearer to their base than where we were. After their departure, I attended to the horses, and then amused myself preparing some fishing lines to set off the shore, with a large stone as an anchor, and a small keg for a buoy. The day was, however, wild and boisterous; and in my attempts to get through the surf, to set the lines, I was thrown down, together with the large stone I was carrying, and my leg severely cut and bruised. The weather was extremely cold, too, and being without coat or jacket of any kind, I suffered severely from it.

The 15th was another cold day, with the wind at south-west, and we could neither set the lines, nor spear sting-ray, whilst the supply we had before obtained was now nearly exhausted. One of the horses was taken ill, and unable to rise, from the effects of the cold; his limbs were cramped and stiff, and apparently unable to sustain the weight of his body. After plucking dry grass, and making a bed for him, placing a breakwind of boughs round, and making a fire near him, we left him for the night.

Late in the evening, the overseer and boy returned from the westward, and reported, that the cliffs were sixteen miles away; that they had dug

for water, but that none could be found, and that there was hardly a blade of grass any where, whilst the whole region around was becoming densely scrubby; through much of which we should have to pass before we reached the cliffs. Altogether, the overseer seemed quite discouraged by the appearance of the country, and to dread the idea of moving on in that direction, often saying, that he wished he was back, and that he thought he could retrace his steps to Fowler's Bay, where a supply of provisions had been buried. I was vexed at these remarks, because I felt that I could not coincide in them, and because I knew that when the moment for decision came, my past experience, and the strong reasons which had produced in my own mind quite a different conviction, would compel me to act in opposition to the wishes of the only European with me, and he a person, too, whom I sincerely respected for the fidelity and devotion with which he had followed me through all my wanderings. I was afraid, too, that the native boys, hearing his remarks, and perceiving that he had no confidence in our future movements, would catch up the same idea, and that, in addition to the other difficulties and anxieties I had to cope with, would be the still more frightful one of disaffection and discontent. Another subject of uneasiness arose from the nature of our diet;—for some few days we had all been using a good deal of the sting-ray fish, and though at first we had found it palatable, either from con-

fining ourselves too exclusively to it, or from eating too much, it had latterly disagreed with us. The overseer declared it made him ill and weak, and that he could do nothing whilst living upon it. The boys said the same; and yet we had nothing else to supply its place, and the small quantity of flour left would not admit of our using more than was barely necessary to sustain life. At this time we had hardly any fish left, and the whole party were ravenously hungry. In this dilemma, I determined to have the sick horse killed for food. It was impossible he could ever recover, and by depriving him of life a few hours sooner than the natural course of events would have done, we should be enabled to get a supply of food to last us over a few days more, by which time I hoped we might again be able to venture on, and attempt another push to the westward.

Early on the morning of the 16th, I sent the overseer to kill the unfortunate horse, which was still alive, but unable to rise from the ground, having never moved from the place where he had first been found lying yesterday morning. The miserable animal was in the most wretched state possible, thin and emaciated by dreadful and long continued sufferings, and labouring under some complaint, that in a very few hours at the farthest, must have terminated its life.

After a great portion of the meat had been cut off from the carcase, in thin slices, they were dipped

in salt water and hung up upon strings to dry in the sun. I could not bring myself to eat any to-day, so horrible and revolting did it appear to me, but the overseer made a hearty dinner, and the native boys gorged themselves to excess, remaining the whole afternoon by the carcase, where they made a fire, cutting off and roasting such portions as had been left. They looked like ravenous wolves about their prey, and when they returned to the camp at night, they were loaded with as much cooked meat as they could carry, and which they were continually eating during the night; I made a meal upon some of the sting-ray that was still left, but it made me dreadfully sick, and I was obliged to lie down, seriously ill.

April 17.—Being rather better to-day, I was obliged to overcome my repugnance to the disagreeable food we were compelled to resort to, and the ice once broken, I found that although it was far from being palatable, I could gradually reconcile myself to it. The boys after breakfast again went down to the carcase, and spent the whole day roasting and eating, and at night they again returned to the camp loaded. We turned all the meat upon the strings and redipped it in sea water again to-day, but the weather was unfavourable for drying it, being cold and damp. Both yesterday and to-day light showers fell sufficient to moisten the grass.

April 18.—The day being much warmer, many large flies were about, and I was obliged to have a

fire kept constantly around the meat, to keep them away by the smoke. I now put the natives upon an allowance of five pounds of flesh each per day, myself and the overseer using about half that quantity.

On the 19th, I sent out one of the boys to try and get a sting-ray to vary our diet, but he returned unsuccessful. During the forenoon I was seized with a violent attack of dysentery, accompanied with diabetes, from which I suffered extremely. The overseer was affected also, but in a less violent degree. The origin of this complaint was plainly traceable to the food we had used for the last day or two; it rendered us both incapable of the least exertion of any kind, whilst the disorder continued, and afterwards left us very languid and weak. In the evening upon examining the meat, a great deal of it was found to be getting putrid, or fly-blown, and we were obliged to pick it over, and throw what was tainted away.

April 20.—To-day I had all the meat boiled, as I thought it would keep better cooked than raw, we had only a small tin saucepan without a handle, to effect our cooking operations with, and the preparation of the meat therefore occupied the whole of the day. The overseer was again attacked with dysentery. At night the clouds gathered heavily around, and the weather being mild and soft, I fully expected rain; after dark, however, the wind rose high and the threatened storm passed away.

On the 21st, I was seized again with illness. The overseer continued to be affected also, and we were quite unable to make the necessary preparations for our journey to the westward, which I fully intended to have commenced to-morrow. For several hours we were in the greatest agony, and could neither lie down, sit up, nor stand, except with extreme pain. Towards the afternoon the violence of the symptoms abated a little, but we were exceedingly weak.

April 22.—Upon weighing the meat this morning, which as usual was left out upon the strings at night, I discovered that four pounds had been stolen by some of the boys, whilst we were sleeping. I had suspected that our stock was diminishing rapidly for a day or two past, and had weighed it overnight that I might ascertain this point, and if it were so, take some means to prevent it for the future. With so little food to depend upon, and where it was so completely in the power of any one of the party, to gratify his own appetite at the expense of the others, during their absence, or when they slept, it became highly necessary to enforce strict honesty towards each other; I was much grieved to find that the meat had been taken by the natives, more particularly as their daily allowance had been so great. We had, moreover, only two days' supply of the meat left for the party, and being about to commence the long journey before us, it was important to economise our provisions to support us under the

fatigue and labours we should then have to undergo.

Having deducted the four pounds stolen during the night, from the daily rations of the three boys, I gave them the remainder, (eight pounds) telling them the reason why their quantity was less to-day than usual, and asking them to point out the thief, who alone should be punished and the others would receive their usual rations. The youngest of the three boys, and the King George's Sound native, resolutely denied being concerned in the robbery; but the other native doggedly refused to answer any questions about it, only telling me that he and the native from King George's Sound would leave me and make their way by themselves. I pointed out to them the folly, in fact the impossibility almost, of their succeeding in any attempt of the kind; advised them to remain quietly where they were, and behave well for the future, but concluded by telling them that if they were bent upon going they might do so, as I would not attempt to stop them.

For some time past the two eldest of the boys, both of whom were now nearly grown up to manhood, had been far from obedient in their general conduct. Ever since we had been reduced to a low scale of diet they had been sulky and discontented, never assisting in the routine of the day, or doing what they were requested to do with that cheerfulness and alacrity that they had previously exhibited. Unaccustomed to impose the least restraint upon

their appetites or passions, they considered it a hardship to be obliged to walk as long as any horses were left alive, though they saw those horses falling behind and perishing from fatigue; they considered it a hardship, too, to be curtailed in their allowance of food, as long as a mouthful was left unconsumed; and in addition to this, they had imbibed the overseer's idea that we never should succeed in our attempt to get to the westward, and got daily more dissatisfied at remaining idle in camp, whilst the horses were recruiting.

The excess of animal food they had had at their command for some few days after the horse was killed, made them forget their former scarcity, and in their folly they imagined that they could supply their own wants, and get on better and more rapidly than we did, and they determined to attempt it. Vexed as I had been at finding out they had not scrupled to plunder the small stock of provisions we had left, I was loth to let them leave me foolishly without making an effort to prevent it. One of them had been with me a great length of time, and the other I had brought from his country and his friends; and to both I felt bound by ties of humanity to prevent if possible their taking the rash step they meditated; my remonstrances and expostulations were however in vain, and after getting their breakfasts, they took up some spears they had been carefully preparing for the last two days, and walked sulkily from the camp in a westerly direction. The youngest boy

had, it seemed, also been enticed to join them, for he was getting up with the intention of following, when I called him back and detained him in the camp, as he was too young to know what he was doing, and had only been led astray by the others. I had intended to have moved on myself to-day, but the departure of the natives made me change my intention, for I deemed it desirable that they should have at least three or four days start of us. Finding that the single sheep we had left would now be the cause of a good deal of trouble, I had it killed this afternoon, that we might have the full advantage of it whilst we had plenty of water, and might be enabled to hoard our bread a little. We had still a little of the horse-flesh left, and made a point of using it all up before the mutton was allowed to be touched.

The morning of the 23rd broke cool and cloudy, with showers gathering from seawards; the wind was south-west, and the sky wild and lowering in that direction. During the forenoon light rain fell, but scarcely more than sufficient to moisten the grass; it would, however, probably afford our deserters a drink upon the cliffs. Towards evening the sky cleared, and the weather became frosty.

On the following day we still remained in camp, hoping for rain;—a single heavy shower would so completely have freed us from the danger of attempting to force a passage through the great extent of arid country before us, that I was unwilling to move on until the very last moment. Our rations were

however rapidly disappearing whilst we were idling in camp, the horse-flesh was all consumed, and to-day we had commenced upon the mutton, so that soon we should be compelled to go, whether it rained or not. Month after month however had passed away without any fall of rain, and the season had now arrived when, under ordinary circumstances, much wet might be expected; and though each day, as it passed without gratifying our hopes, but added to our disappointment, yet did every hour we lingered give us a better chance of being relieved by showers in our route round the last cliffs of the Bight. The evening set in mild but close, with the wind at north-east, and I had great hopes that showers would fall.

April 25.—During the night dense clouds, accompanied by gusts of wind and forked lightning, passed rapidly to the south-west, and this morning the wind changed to that quarter. Heavy storms gathered to seawards with much thunder and lightning, but no rain fell near us; the sea appearing to attract all the showers. The overseer shot a very large eagle to-day and made a stew of it, which was excellent. I sent the boy out to try and shoot a wallabie, but he returned without one.

In the evening, a little before dark, and just as we had finished our tea, to my great astonishment our two runaway natives made their appearance, the King George's Sound native being first. He came frankly up, and said that they were both sorry for what they had done, and were anxious to be received

again, as they found they could get nothing to eat for themselves. The other boy sat silently and sullenly at the fire, apparently more chagrined at being compelled by necessity to come back to us than sorry for having gone away. Having given them a lecture, for they both now admitted having stolen meat, not only on the night they were detected but previously, I gave each some tea and some bread and meat, and told them if they behaved well they would be treated in every respect as before, and share with us our little stock of provisions as long as it lasted.

I now learnt that they had fared in the bush but little better than I should have done myself. They had been absent four days, and had come home nearly starved. For the first two days they got only two small bandicoots and found no water; they then turned back, and obtaining a little water in a hollow of the cliffs, left by the shower which had passed over, they halted under them to fish, and speared a sting-ray; this they had feasted on yesterday, and to-day came from the cliffs to look for us without any thing to eat at all.

During the night some heavy clouds passed over our heads, and once a drop or two of rain fell. The 26th broke wild and stormy to the east and west, and I determined to remain one day longer in camp, in the hope of rain falling, but principally to rest the two natives a little after the long walk from which they had returned. Breakfast being over, I sent the

overseer and one native to the beach, to try to get a sting-ray, and to the other I gave my gun to shoot wallabie: no fish was procured, but one wallabie was got, half of which I gave to the native who killed it, for his dinner.

Being determined to break up camp on the 27th, I sent the King George's Sound native on a-head, as soon as he had breakfasted, that, by preceding the party, he might have time to spear a sting-ray against we overtook him. The day was dull, cloudy, and warm, and still looking likely for rain, with the wind at north-east. At eleven we were ready, and moved away from a place where we had experienced so much relief in our extremity, and at which our necessities had compelled us to remain so long. For twenty-eight days we had been encamped at the sand-drifts, or at the first water we had found, five miles from them. Daily, almost hourly, had the sky threatened rain, and yet none fell. We had now entered upon the last fearful push, which was to decide our fate. This one stretch of bad country crossed, I felt a conviction we should be safe. That we had at least 150 miles to go to the next water I was fully assured of; I was equally satisfied that our horses were by no means in a condition to encounter the hardships and privations they must meet with in such a journey; for though they had had a long rest, and in some degree recovered from their former tired-out condition, they had not picked up in flesh or regained their spirits; the sapless, withered state

of the grass and the severe cold of the nights had prevented them from deriving the advantage that they ought to have done from so long a respite from labour. Still I hoped we might be successful. We had lingered day by day, until it would have been folly to have waited longer; the rubicon was, however, now passed, and we had nothing to rely upon but our own exertions and perseverance, humbly trusting that the great and merciful God who had hitherto guarded and guided us in safety would not desert us now.

Upon leaving the camp we left behind one carbine, a spade, some horse hobbles, and a few small articles, to diminish as much as possible the weight we had to carry. For eight miles we traced round the beach to the most north-westerly angle of the Bight, and for two miles down its south-west shore, but were then compelled by the rocks to travel to the back, through heavy scrubby ridges for four miles; after which we again got in to the beach, and at one mile along its shore, or fifteen miles from our camp, we halted for the night, at a patch of old grass. The afternoon had been hot, but the night set in cold and clear, and all appearance of rain was gone. The native I had sent on before had not succeeded in getting a fish, though he had broken one or two spears in his attempts.

April 28.—After travelling along the beach for two miles we ascended behind the cliffs, which now came in bluff to the sea, and then keeping along

their summits, nearly parallel with the coast, and passing through much scrub, low brushwood, and dwarf tea-tree growing upon the rocky surface, we made a stage of twenty miles; both ourselves and the horses greatly tired with walking through the matted scrub of tea-tree every where covering the ground. The cliffs did not appear so high as those we had formerly passed along, and probably did not exceed from two to three hundred feet in elevation. They appeared to be of the same geological formation; the upper crust an oolitic limestone, with many shells embedded, below that a coarse, hard, grey limestone, and then alternate streaks of white and yellow in horizontal strata, but which the steepness of the cliffs prevented my going down to examine.

Back from the sea, the country was rugged and stony, and every where covered with scrub or dwarf tea-tree. There was very little grass for the horses, and that old and withered. In the morning one of the natives shot a large wallabie, and this evening the three had it amongst them for supper; after which they took charge of the horses for the night, this being the first time they had ever watched them on the journey, myself and the overseer having exclusively performed this duty heretofore; but, as I was now expecting a longer and almost more arduous push than any we had yet made, and in order that we might be able to discharge

efficiently the duties devolving upon us, and make those exertions which our exigences might require, I deemed it only right that we should sometimes be assisted by the two elder boys, in a task which we had before always found to be the most disagreeable and fagging of any, that of watching the horses at night, after a long and tiring day's journey."

On the morning of the 29th we moved away very early, passing over a rocky level country, covered with low brush, and very fatiguing to both ourselves and our horses. The morning was gloomy and close, and the day turned out intensely hot. After travelling only fifteen miles we were compelled to halt until the greatest heat was passed. Our stock of water and provisions only admitted of our making two meals in the day, breakfast and supper; but as I intended this evening to travel great part of the night, we each made our meal now instead of later in the day, that we might not be delayed when the cool of the evening set in. We had been travelling along the summit of the cliffs parallel with the coast line, and had found the country level and uniform in its character; the cliffs still being from two to three hundred feet in elevation, and of the same formation as I noticed before. There were patches of grass scattered among the scrub at intervals, but all were old and withered.

At four in the afternoon we again proceeded on our journey, but had not gone far before the sky

unexpectedly became overcast with clouds, and the whole heavens assumed a menacing and threatening appearance. To the east and to the west, thunder-clouds gathered heavily around, every indication of sudden and violent rain was present to cheer us as we advanced, and all were rejoicing in the prospects of a speedy termination to our difficulties. The wind had in the morning been north-east, gradually veering round to north and north-west, at which point it was stationary when the clouds began to gather. Towards sunset a heavy storm passed over our heads, with the rapidity almost of lightning; the wind suddenly shifted from north-west to south-west, blowing a perfect hurricane, and rendering it almost impossible for us to advance against it. A few moments before we had confidently expected a heavy fall of rain; the dark and lowering sky had gradually gathered and concentrated above and around us, until the very heavens seemed over-weighted and ready every instant to burst. A briefer interval of time, accompanied by the sudden and violent change of wind, had dashed our hopes to the ground, and the prospect of rain was now over, although a few heavy clouds still hung around us.

Three miles from where we had halted during the heat of the day, we passed some tolerable grass, though dry, scattered at intervals among the scrub, which grew here in dense belts, but with occasional openings between. The character of the ground was very

rocky, of an oolitic limestone, and having many hollows on its surface. Although we had only travelled eighteen miles during the day, the overseer requested I would stop here, as he said he thought the clouds would again gather, and that rain might fall to-night; that here we had large sheets of rock, and many hollows in which the rain-water could be collected; but that if we proceeded onwards we might again advance into a sandy country, and be unable to derive any advantage from the rain, even should it fall. I intended to have travelled nearly the whole of this night to make up for the time we had lost in the heat of the day, and I was the more inclined to do this, now that the violence of the storm had in some measure abated, and the appearance of rain had almost disappeared. The overseer was so earnest, however, and so anxious for me to stop for the night, that greatly against my own wishes, and in opposition to my better judgment, I gave way to him and yielded. The native boys too had made the same request, seconding the overseer's application, and stating, that the violence of the wind made it difficult for them to walk against it.

The horses having been all hobbled and turned out to feed, the whole party proceeded to make break-winds of boughs to form a shelter from the wind, preparatory to laying down for the night. We had taken a meal in the middle of the day,

which ought to have been deferred until night, and our circumstances did not admit of our having another now, so that there remained only to arrange the watching of the horses, before going to sleep. The native boys had watched them last night, and this duty of course fell to myself and the overseer this evening. The first watch was from six o'clock P. M. to eleven, the second from eleven until four A. M., at which hour the whole party usually arose and made preparations for moving on with the first streak of daylight.

To-night the overseer asked me which of the watches I would keep, and as I was not sleepy, though tired, I chose the first. At a quarter before six, I went to take charge of the horses, having previously seen the overseer and the natives lay down to sleep, at their respective break-winds, ten or twelve yards apart from one another. The arms and provisions, as was our custom, were piled up under an oilskin, between my break-wind and that of the overseer, with the exception of one gun, which I always kept at my own sleeping place. I have been thus minute in detailing the position and arrangement of our encampment this evening, because of the fearful consequences that followed, and to shew the very slight circumstances upon which the destinies of life sometimes hinge. Trifling as the arrangement of the watches might seem, and unimportant as I thought it at the time, whether I under-

took the first or the second, yet was my choice, in this respect, the means under God's providence of my life being saved, and the cause of the loss of that of my overseer.

The night was cold, and the wind blowing hard from the south-west, whilst scud and nimbus were passing very rapidly by the moon. The horses fed tolerably well, but rambled a good deal, threading in and out among the many belts of scrub which intersected the grassy openings, until at last I hardly knew exactly where our camp was, the fires having apparently expired some time ago. It was now half past ten, and I headed the horses back, in the direction in which I thought the camp lay, that I might be ready to call the overseer to relieve me at eleven. Whilst thus engaged, and looking steadfastly around among the scrub, to see if I could anywhere detect the embers of our fires, I was startled by a sudden flash, followed by the report of a gun, not a quarter of a mile away from me. Imagining that the overseer had mistaken the hour of the night, and not being able to find me or the horses, had taken that method to attract my attention, I immediately called out, but as no answer was returned, I got alarmed, and leaving the horses, hurried up towards the camp as rapidly as I could. About a hundred yards from it, I met the King George's Sound native (Wylie), running towards me, and in great alarm, crying out, " Oh Massa, oh Massa, come

here,"—but could gain no information from him, as to what had occurred. Upon reaching the encampment, which I did in about five minutes after the shot was fired, I was horror-struck to find my poor overseer lying on the ground, weltering in his blood, and in the last agonies of death.

APPENDIX.

ROYAL ASIATIC SOCIETY LIBRARY OF THE BOMBAY BRANCH OF THE

C Hullmandel's Patent Lithotint

1. PHRYNISCUS AUSTRALIS
2. DISCOGLOSUS ORNATUS.
3. PERIALIA EYREI

APPENDIX.

DESCRIPTION OF SOME NEW AUSTRALIAN ANIMALS.

By J. E. Gray, Esq., F.R.S.

I. It was formerly believed, that all the Mammalia inhabiting the Australian continent, but the wild dog, were marsupial; but as the natural history of the country is better known, we are becoming acquainted with nearly as many native non-marsupial beasts as there are marsupial; but they are certainly, generally, of a small size, such as bats, mice, &c., as compared to the kangaroos and other marsupial genera.

Some years ago, in the Proceedings of the Geological Society, (iii. 52.) I described a species of *Rhinolophus*, from Moreton Bay, which was peculiar for the large size of its ears, hence named *R. megaphyllus;* the one now about to be described, which was found flying near the hospital at Port Essington, by Dr. Sibbald, R.N., is as peculiar for the brightness and beauty of its colour, the male being nearly as bright an orange as the Cock of the rock (*Rupicola*) of South America.

The Orange Horse-shoe Bat, (Rhinolophus aurantius.) t. 1. f. 1.—Ears moderate, naked, rather pointed at the end; nose-leaf large, central process small, scarcely lobed, blunt at the top; fur elongate, soft, bright orange, the hairs of the back with short brown tips, of the under side rather paler, of the face rather darker; female pale yellow, with brown tips to the hair of the upper parts.

Inhab. Port Essington, near the Hospital, Dr. Sibbald, R.N.

The membranes are brown, nakedish; the tail is rather produced beyond the membrane at the tip; the feet are small, and quite free from the wings.

	Male.	*Female.*
The length of the body and head	1.10	1.10
,, fore-arm bone	1.11	1.10
,, shin-bone	8	8
,, ankle and foot	4	4

II. In Captain Grey's Travels in Western Australia I gave a list of the different species of Reptiles and Amphibia found in Australia. Since that period the British Museum has received from the different travellers various other species from that country. The lizards have been described in the catalogue of the Museum collection, recently published, and are being figured in the zoology of H.M.S. Erebus and Terror. Two of the most interesting specimens lately received, belong to a new genus of frogs which appear to be peculiar to Australia, which I shall now proceed to describe:—

Genus Perialia. Fam. *Ranidæ*.—Tongue nearly circular, entire; palate concave, with two groups of palatine teeth between the orifices of the internal nostrils; jaw toothed; head smooth, high on the side; mouth large; eyes convex, swollen above, tympanum scarcely visible; back rather convex, high on the sides; skin smooth, not porous; limbs rather short; toes 4.5, tapering to a point, nearly free, the palms with roundish tubercles beneath; the fourth hind toe elongate, the rest rather short; the ankle with an oblong, compressed, horny, sharp-edged tubercle on the inner side at the base of the inner toe; the male with an internal vocal sac under the throat.

This genus agrees with *Sciaphos*, *Pyxicephalus*, and

ROYAL LIBRARY OF THE BOMBAY BRANCH OF THE ASIATIC SOCIETY

C.Hullmandel's Patent Lithotint

1. RHINOLOPHUS AURANTIUS.
2. CYSTIGNATHUS DORSALIS.

Pelolates, in having a large, sharp-edged tubercle on the inner edge of the ankle, but it differs from them at first sight, by the head and body being compressed and high, the mouth very large, and the eyes convex on the side of the forehead.

Perialia Eyrei, t. 2. f. 3.—Olive, sides of the face, and body blackish brown; face varies with white streak; the sides of body marbled with unequal white spots; limbs brown and white marbled; under side of the body whitish.

Inhab. Australia, on the banks of the river Murray.

Perialia? ornata, t. 2. f. 2.—Pale grey, back and sides, marbled with symmetrical dark-edged spots, those of the middle of the back being generally confluent, of the face elongate, band-like; the legs dark-banded, beneath white.

Inhab. Port Essington.

Somewhat like *Discoglosus pictus* in appearance. The internal nostrils are far apart, with an elongate group of palatine teeth level with their hinder edges.

Taking advantage of the space of the plate, figures of the following species from the same country, which have not hitherto been illustrated have been added. They were described or noticed in the list before referred to.

1. Cystignathus dorsalis, t. 1. f. 2. *Gray, Ann. Nat. Hist.* 1841.

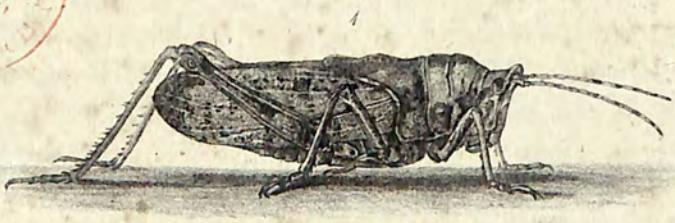
2. Phryniscus Australis, t. 2. f. 1. *Dum. and Bib. E. Gen.* viii. 725. Bombinator Australis, *Gray, Proc. Zool. Soc.* 1838. 57.

III. Mr. Eyre having brought home with him the drawing of a species of cray-fish found near the river Murray, which is called by the natives *Ukodko*, I have been induced to examine the different species of Astaci in the British Museum collection, which have been received at various times from Australia, for the purpose of attempting to identify it.

As we have three very distinct species which have not yet been described or figured in any of the works which have passed under my inspection, I shall proceed to detail their peculiar characters and give figures of their more characteristic features.

The drawing of "the *Ukodko* or smaller Murray crayfish" most nearly resembles *Astacus quinque-carinatus*, but it is three or four times larger than any of the specimens of that species which we possess, and the figure does not shew any indications of the five keels on the front of the head. In wanting the keel on the thorax it agrees with an Australian species described by Mr. Milne Edwards under the name of *Astacus Australasiensis*, said to come from New Holland, and to be about two inches long, while Mr. Eyré's figure is more than six inches, and is said not to be taken from a large specimen. It differs from Mr. Milne Edwards' figures, in having only one spine on the wrist, so that probably there are still two more species of the genus to be found in Australia.

Mr. Eyre in his notes states—"The Fresh water crayfish, of the smaller variety; native names, ēu-kōd-kŏ, or kōōn-gŏ-lă, is found in the alluvial flats of the river Murray, in South Australia, which are subject to a periodical flooding by the river; it burrows deep below the surface of the ground as the floods recede and are dried up, and remains dormant, until the next flooding recals it to the surface; at first it is in a thin and weakly state, but soon recovers and gets plump and fat, at which time it is most excellent eating. Thousands are procured from a small space of ground with ease, and hundreds of natives are supported in abundance and luxury by them for many weeks together. It sometimes happens that the flood does not recur every year, and in this case the eu-kod-ko lie dormant until the next, and a year and a half would thus be passed below the sur-



Hullmandel & Walton Lithographers.

1. PETASIDA EPHIPPIGERA. 2. CHRYSOPA MACULIPENNIS.
3. EURYBRACHYS LÆTA. 4. TETTIGARCTA TOMENTOSA.
5. IT'S PUPA CASE.

face. I have often seen them dug out of my garden, or in my wheat field, by the men engaged in digging ditches for irrigation. The floods usually overflow the river flats in August or September, and recede again in February or March. For further particulars respecting the modes of catching the eu-kod-kos, vide vol. ii. pages 252 and 267."

"I have spoken of this cray-fish as the *smaller* variety as respects the Murray. It is *larger* than the one found *in* the *ponds* of the river Torrens at Adelaide; but *in* the river Murray one is procured of a size ranging to 4½ lbs., and which is *quite equal* in flavour to the *finest* lobster."

These latter have not yet been received in any of our collections, so that we are unable to state how it differs from those now described: they must be the giants of the genus.

1. The Van Diemen's Land Cray-fish. *Astacus Franklinii*, t. 3. f. 1. — Carapace convex on the sides, rather rugose on the sides behind, the front only slightly produced and edged with a toothed raised margin not reaching beyond the front edge of the lower orbit, and with a very short ridge at the middle of each orbit behind; the hands compressed, rather rugose, edge thick and toothed: wrist with four or five conical spines on the inner side, the front the largest: the central caudal lobe, broad, continuous, calcareous to the tip, lateral lobes, with a very slight central keel; the sides of the second abdominal rings spinose.

Inhab. Van Diemen's Land.

Mr. Milne Edwards, (Archives du Museum, ii. 35. t. 3.) has recently described a species of this genus from Madagascar, under the name of *A. Madagascariensis*, which is nearly allied to the Van Diemen's Land species, in the shortness of the frontal process, the spines on the sides of the second abdominal segment, and in the lobes of the tail; but it differs from it in the length of the claws, and other parti-

culars. Madagascar appears to be the tropical confines of the genus.

2. The Western Australia Cray-fish. *Astacus quinque-carinatus*, t. 3. f. 3.—Carapace smooth, rather convex, andwith three keels above; the beak, longly produced, ending in a spine, simple on the side and produced into a keel on each side behind; the central caudal lobe rather narrow, indistinctly divided in half, and like the other lobes flexile at the end, the lateral lobes with a central keel ending a slight spine; the hands elongated, compressed, smooth, with a thickened, toothed, inner margin, which is ciliated above; wrist with two conical spines on the inner side.

Inhab. Western Australia, near Swan River.

3. The Port Essington Cray-fish. *Astacus bicarinatus*, t. 3. f. 2.—Carapace smooth, rather flattened, with a keel on each side above in front; the beak longly produced, flattened, three toothed at the top; hands rather compressed, smooth, thinner and slightly toothed on the inner edge; the wrist triangular, angularly produced in front; the central caudal lobes with two slightly diverging keels continued, and like the others thin and flexible at the end, the inner lateral lobes with two keels, each ending with a spine.

Inhab. Port Essington, Mr. Gilbert.

The *A. Australasiensis*, Milne Edwards, Crust ii. 332. t. 24. f. 1—5. agrees with this species in the form of the beak, but the keels on the thorax are not noticed either in the description or in the figure; and the caudal lobes in the figure appear most to resemble *A. Franklinii*.

As the genus *Astacus* is now becoming more numerous in species, it may be divided, with advantage, into three sections, according to the form of the caudal lobes; thus:—

A. The central caudal lobes divided by a transverse suture into two parts, both being hard and calcareous, and with a small spine at the outer angle of the suture (*Patamobius*,

Leach) as *A. fluviatilis* of Europe, and *A. affinis* of North America, with an elongated rostrum, and *A. Bartonii* of North America, with a short rostrum.

B. The central caudal lobe continued hard and calcareous to the end, as *Astacus Franklinii* of Van Diemen's Land, and *A. Madagascariensis* of Madagascar; both have a very short beak, and the second abdominal ring spinose.

C. The central caudal lobe continued or only slightly divided on the middle of each side; but it and all the lateral lobes are thin and flexible at the hinder parts, as *Astacus quinque-carinatus*, and *A. bicarinatus* of Australia, and *A. Chiliensis* of Chili.

CATALOGUE OF REPTILES AND FISH,

FOUND AT KING GEORGE'S SOUND,

BY DEPUTY ASSISTANT COMMISSARY-GENERAL NEILL,

In a Letter to J. E. GRAY, ESQ. *British Museum, London.*

"SIR,—Although in the course of my life, I have had little opportunity to pay attention to the study of Ichthyology, it occurred to me, as now and then a leisure moment was afforded from official duties, that it would perhaps be useful, as well as amusing, to collect and make drawings of the fish about King George's Sound; and I have been in a great degree stimulated to do so, from an accidental visit of my friend, His Excellency Captain Grey, Governor of South Australia, who advised me to forward the drawings to you for the purpose of being placed with others of a similar kind in the British Museum, where ultimately sufficient material may be collected to give some account of the New Holland fish.

"Nothing is assumed as to the execution of the drawings; in fact it often occurred when I set off in my little skiff, (especially in the outset) that seven or eight species were procured in the course of the excursion, which compelled me to make drawings of all when I came home tired in the evening; forwarding them to ensure, as far as possible, their colours before they became extinct—a sort of forced effort in respect to the execution has, therefore, only been

effected. The outline of nearly every specimen was taken from *actual profile*, by laying the fish upon the paper—in this way I defied error in outline—of course, afterwards carefully drawing and correcting various parts which required it, in a free or rough manner, time not admitting of much pains.

"In naming the fish, I have merely attempted to give the aboriginal and popular names known to the sealers and settlers. In obtaining the former, no little difficulty has been experienced. The younger natives generally giving different names to those of the elder; but finding the fish named by the latter more descriptive, I have, of course, in most instances, adopted them.

"For instance, No. 1, *Kojetuck* means the fish with the bones; which is very descriptive, from Koje the bones,* having very singular bones placed vertically in the neck, connecting the dorsal spines to the back, resembling small tobacco pipes.

"Also the *Kynarnock*, No 13, the bearded, &c. In many other instances the savages of this province are equally clear in naming their animals; and it is curious, even this applies to their children, who commonly receive their name from some extraordinary circumstance at, or about the time of their birth. I find, also, the old men are more minute in *species*; the younger often call very different fish by the same name, as the *Memon*, Nos. 17, and 43, &c. but as this is curious, merely for the sake of fact, it is otherwise of little importance to the naturalist,—the native name being only useful to enable the collector to obtain any particular species hereafter. As regards the fidelity of the drawings, it may be worth while to mention a singular mistake made by my friend *Toolegetwalee*; one of the

* This was noticed by Governor Grey.

oldest and most friendly savages we have of the King George tribe; who, in looking over my collection to assist me in naming them, observed that the drawings were a little raised off the paper; and like a monkey, began to touch them with his long talons; of course I flew to their rescue, and asked what he meant?

"'*Iniken* how make em? me *twank* skin put him on!' which literally means—'Ah! I now see how you do it, you put the skin on!!' From want of paper of uniform size, I was obliged to use any paper which came to hand, cut the figures out, and afterwards paste them on clean paper; which circumstance gave rise to the poor savage's mistake, and it was not until I actually cut one out before him, that he could be convinced that he was in error—a compliment I could hardly help smiling at. I have only to add in conclusion, that no attempt has been made at *arrangement*, having drawn and numbered the fish as they were caught. Most have been taken by my own hook; some by the native's spear, and some by the seine net.

"The natural *scale* of each has been pasted on to the drawing, and when remarkable, both from the back and sides of the fish, which I considered a more desirable plan than giving imitations, that could hardly, in objects so minute, without the aid of a powerful magnifier, be depended on.

"A descriptive account of each specimen, with the corresponding number to that on the drawing, is also added.

"The effort has afforded me much amusement, and it will be still more agreeable, if they will in any way contribute to a better knowledge of the subject.

"I remain, Sir,

"Your most obedient servant,

"J. NEILL.

"Albany, King George's Sound,
"Western Australia."

On receiving this most valuable and interesting collection, I referred the part relative to the Fish to my excellent friend, Dr. Richardson of Haslar, one of the first Ichthyologists now living, who has kindly arranged the notes in systematic order, and added to them, as far as he was able, the modern scientific names. I have done the same to the Reptiles myself. I have retained the original numbers, as they refer to the drawings which are preserved in the zoological department of the British Museum.—J. E. Gray.

REPTILES.

Fam. Lialisidæ.

Lialis *Burtonii*. Native name *Kerry-gura*. Considered by the natives as harmless; the scales of the back are very minute; the tail when broken is sometimes terminated by three horny blunt ends; tongue divided and rounded.

Lialis bicatenata. Native name *William lunger*. Tongue not forked, broad, and rounded off at the point. Not poisonous or at all dreaded by the natives; finely striped down the back, and spotted with deep brown equal marks; has a lappel on each side of the vent.

Killed 10th of October, 1841.

Fam. Colubridæ.

Naja, ——? Native name *Torn-ock* or *Tookyte*. Colour dirty olive over the whole body; belly dirty olive; white, faintly dotted from the throat down to the vent, with reddish dirty orange spots; the whole colour appears as if faded; the scales are more closely united to the skin than those of the *Noon*; fangs placed on each side of the upper jaw, short and rather blunt; scuta, 223.

Although the natives assert, if a person is bitten by this snake, and "gets down," *i. e.* lays in bed three days, he

will recover, yet I am very doubtful of this account, more particularly from the women differing from the men, as well as the whole subject being hidden in superstition. Another ground of doubt rests upon the fact of having lost in Van Diemen's Land, a favourite dog, by the bite of a snake very similar to this; the poor animal expired fourteen minutes after the bite, although the piece was almost instantaneously cut out.

The women of King George's Sound declare the bite of the Torn-ock mortal; but the men laugh at that, and maintain the three days' "couple," (sleep) will restore the patients.

The specimen was 4 ft. 9 in. long, but they have been seen 6 or 7 feet long. This is a favourite food of the natives of King George's Sound.

Coluber? Native name *Bardich.* Dirty olive green over the whole back; belly dirty white; scuta 130.

The natives state that the bite produces great swelling of the part for a day or two, and goes off.

Never grows above 14 or 15 inches long. Caught October 1841.

Coluber. Native name *Torkite* or *Torkyte.* Back, from the point of the tail to the point of the nose, dark sepia brown; under the head yellow; and towards the middle of the belly orange; scales minute; scuta 140; tongue forked; teeth very minute; no fangs observable. Caught August 30th, 1844.

Not at all dreaded by the natives; venomous, but not deadly, the bite merely producing a bad ulcer for a day or two.

Elaps melanocephalus. Native name *Werr.* Dirty olive green on the back, from the neck to the tail; scuta 147, dirty reddish orange; head black from the nose to neck; sides of the head white; tongue forked.

Doubtful if poisonous; little dreaded by the natives. Killed October 12th, 1845.

Elaps. Native name *Norn* or *Norne* Whole body covered with spear-shaped scales; head shining black; the ground colours of the back rich umber, almost black; scuta 161, of a dirty red orange; fangs two on each side of the upper jaw near the lips, small, and bent inwards; tongue forked

This is the most fatal of the New Holland snakes; the animal bitten seldom recovers. The Aborigines have a great dread of this reptile; they however eat of it if they kill it themselves, but there is a superstition amongst them about snakes, which prevents their eating them if killed by a European.

The specimen I figured was a small one, 3 ft. 9 in. long; they are often seen by the natives much larger. I have endeavoured to represent it as it generally sleeps or lies in wait for its prey, small birds, frogs, lizards, &c. It delights in swamps and marshes.

Killed October, 1844.

Fam. Boidæ.

Python. Native name *Wakel* or *Wa-a-kel.* This snake is considered by the natives a great delicacy, and by their account resembles mutton in flavour, being also remarkably fat. I requested them to let me taste the specimen from which the drawing was made; but they devoured every atom themselves, pretending they did not understand me. The *Wakel* differs from the *Norn* in its habits; although both ascend trees in pursuit of small birds and the young of the opossums. The *Wakel* delights in rocky, dry places, near salt water; they are very sluggish, and easily caught by the women, who seize them behind the head and wring their necks. They are described to have been seen 9 or 10 feet long. My specimen, a young male, was exactly 5 feet long. The scales of this species are

firmly fixed to the skin, in plates all over the back and belly. The colour is beautiful, dark greenish brown, finely variegated with yellowish white spots.

It was killed by Paddy, a native constable, near Albany, October, 1841.

FISHES.

GOBIIDÆ.

No. 58.—*Patœcus fronto.* Rich. Ann. Nat. Hist. Oct. 1844, vol. xiv. p. 280, Ichth. Ereb. and Terr. p. 20, pl. 13, f. 1, 2.

Native name *Karrack.* Colour, a rich dragon's blood, or mahogany; found by a Danish boatman, named Byornsan, 80 miles off the east coast from King George's Sound, December 11th, 1841. Anal rays imperfectly counted, and there is a typographical error in the Zool. of Ereb. and Terr. The true numbers of the rays follow: B. 6; D. 24-16; A. 11-5; C. 10; P. 8.

TRIGLIDÆ.

No. 53.—*Scorpœna*, or *Sebastes.*—Native name, *Tylyuck*, or *Teluch* (*Big-head*). "Rays, D. 12, 1-8; A. 3-5; P. 21; V. 1-5."

Uncommon. Inhabits rocky shores. Flesh firm and well-flavoured. Caught by hook, 16th Aug. 1841.

No. 34.—*Sebastes?*—Native name, *Cumbĕuk.*

A common inhabitant of rocky shores. Good eating. The specimen was speared by Munglewert, 17th May, 1841. "Rays, D. 14-17; A. 3-8; P. 14; V. 1-5."

No. 14.—*Apistes.* Apparently scaleless, and without free pectoral rays. Does not correspond well with *A. Marmoratus.* "Rays, D. 12," &c. Caught by Seine, 18th March, 1841.

The fishermen dread wounds made by the species of this fish, as they always fester.

Native name *Boora-Pokey*, or *Poky*. *Sergeant* of the settlers.

No. 36.—*Platycephalus.*—Native name *Cumbel*. Common Flat-head of the settlers. Seems to differ from described species in the two dark bars of the tail, being directly transverse, and followed by five large dark purple round spots.

Inhabits sandy shores very commonly, all round the coast of New Holland. A variety occurs at Maria Island, Van Diemen's Land. Caught by hook, 15th May, 1841. Good eating.

MULLIDÆ.

No. 13.—*Upeneus.*—Native name, *Miname*, or *Kgnarnuck* (the bearded); "Red mullet" of the settlers.

PERCIDÆ.

No. 46.—*Enoplosus armatus.* Cuv., et Val. 2, p. 133, pl. 20.—Native name, *Karlock*. Speared by a native, June 1841. Inhabits rocky shores.

BERYCIDÆ.

No. 2.—*Beryx lineatus*, C. & V. 3, p. 226.—Native name, *Chetong*. Red Snapper, or Tide-fisher of the sealers. Very common in the bays of rocky shores. "Rays, D. 5-14; A. 4-13: P. 12; V. 1-7."

SPHYRÆNIDÆ.

No. 59.—*Sphyræna.*—Native name, *Kordong*. "Rays, D. 5, 1-9; A. 11; P. 13; V. 1-5."

The "Common Baracoota" is found off the whole coast of New Holland, but the *Kordong* seems to be peculiar to Western Australia. It comes into the shallow bays in summer; and being a sluggish fish, is easily speared by the

natives, who esteem it to be excellent food. It will lay for a minute looking with indifference at its enemy, while he poises the fatal and unerring spear. Specimen caught in a net, December, 1841.

SILLAGINIDÆ.

No. 25. — *Sillago.* — Native name, *Murdar.* "Rock whiting" of the settlers. "Rays, D. 10-23; A. 18; P. 13; A. 5."

Inhabits rocky shores and deep water. Caught by the seine, 3rd April, 1841. Good eating.

No. 11.—*Sillago punctata*, C. et V. 3, p. 413.—Native name *Murdar.* "Common whiting" of the settlers. "Rays, D. 12, 1-26; A. 22; P. 11; V. 5."

Inhabits shallow sandy bays abundantly, and is much admired for the delicacy of its flesh, but it is dryer eating than the whiting of Europe.

SCIÆNIDÆ.

No. 55.—*Corvina?*—Native name *T'chark or T'chyark.* King-fish of the sealers. "Rays, D. 9—1-27; A. 1-7; P. 15; V. 1-5."

Teeth strong and sharp. Grows to a great size; as I am informed by the natives, that they often spear individuals weighing sixty or seventy pounds. This fish enters the fresh-water periodically, like the Salmon of Europe, to spawn, and it is the only fish in this country which I have distinctly made out to do so. It is tolerably good eating. The specimen was caught at the mouth of Oyster Harbour by a hook, on the 30th August, 1841. (This may be the adult of the *Corvina Kuhlii* of the *Histoire des poissons*, 5. p. 121.)

SERRANIDÆ.

No. 19. — *Centropristes trutta. Sciæna trutta*, G. Foster, Icon. 210. (vide Ichth. of Ereb. and Terror, p.

30.)—Native name *King-nurrie,* or *Iinagur.* "Salmon" of the sealers. Pectorals yellow or orange coloured, with dark bases; scales faintly fan-streaked; last rays of dorsal and anal elongated. Faint oblong, orange-coloured spots on the sides, not in vertical rows. "Rays, D. 9-16; A. 2-10; P. 16." Eye remarkably brilliant. Good eating in the summer time, but far inferior to the *Salmo salar.* It congregates in vast shoals, and pursues the fry of other fishes in shallow bays, but never enters fresh-water. It is often taken of from seven to ten pounds weight. It affords excellent sport to the angler. The specimen was caught by the hook from my own door on the 4th May, 1841.

No. 3.—*Centropristes* (*Cirripis*) *georgianus.* C. et V. 7. p. 451. Jenyn's Zool. of Beagle, p. 13.—Native name *Warraguit.* "Herring" of the settlers. Rays, D. 9-14; A. 3-10; &c.

Inhabits rocky shores, and is taken in the summer, by net on sandy beaches. Specimen caught by the hook, on the 27th March, 1841.

No. 23.—*Serranus?* vel *Caprodon* (Schlegel.) aut *Plectropoma.*—Native name *Tāang* or *Tāā* (It bites.) The "Perch" of the Sealers. "Rays, D. 10-24; A. 2-9; P. 14; V. 1-5."

Eye fine crimson: pupil deep blue-black. Tail slightly rounded. Remarkably strong canines, from which peculiarity it has obtained its native name of *Taa,* as it bites severely when taken, if the fisher be not on the alert. It is good to eat, but is not common. Caught by the hook on 9th of April, 1841.

No. 4.—*Plectropoma nigro-rubrum.* C. et V. 2. p. 403. —Native name *Bundel.* "Crab-eyed soldier" of the settlers. "Rays, D. 10-17; A. 3-9."

Inhabits rocky shores, and is not common. Specimen caught by the hook, on the 4th April, 1841. Good eating.

No. 21.—*Helotes?*—Native names, *Boora*, *Bowru*, also *Charlup*. The "Pokey," or "small Trumpeter" of the sealers. "Rays, D. 11—1-11; A. 2-11; &c."

Inhabits rocky places. Good to eat. Caught by the seine, on the 3rd March, 1841.

CIRRHITIDÆ.

No. 24. — *Cheilodactylus gibbosus*. Solander. Icon. Ined. Banks. No. 23.—Richardson Zool. Trans. 3, p. 102.—Native name *Knelock* (not certain).

Inhabits sandy beaches; is little known to the sealers. Caught in a net, 3rd March, 1841.

No. 39. *Cheilodactylus carponemus*.—C. et V. 5. p. 362. —Native name *Chettang*. "Jew-fish" of the sealers (the name "Jew-fish" is applied otherwise by the colonists).

Inhabits rocky shores. Some specimens weigh upwards of sixteen pounds. Caught by hook, 17th May, 1841.

No. 42. — *Cheilodactylus*. Native name *Toorjenong*. "Black Jew-fish" of the sealers. "Rays, D. 16-26; A. 2-10; P. 13; V. 5."

Inhabits rocky points of sandy bays, where they love to run in and root up the sand with their fleshy mouths. They are sluggish, and easily speared by the Aborigines, whose chief food it constitutes at certain seasons. The specimen was speared in my presence by Wallup, on the 8th of June, 1841. The *Toorjenong* grows to a large size, exceeding twenty pounds in weight. It is a gross feeder, and its flesh is hard and dry, but the head and sides are much prized by the natives, and the head of a large one makes tolerable soup.

No. 45.—*Latris?* (vix. *Gerres?*)—Native name *Quike* or *Quik*, (horned). "Rays, 9-16; A. 3-16; P. 14; V. 1-5."

Caught by the hook, off Rocky Point, on the 17th of August, 1844. Good to eat. (A spine before each nostril, probably springing from the heads of the maxillaries).

SPARIDÆ.

No. 1.—*Pagrus guttulatus.* C. et V. 6, p. 160.—Native name *Kojetuck.* "Common Snapper" of the sealers, "Rays, D. 12-9; A. 3-8; P. 1-5."

The Snapper grows to a large size, attaining from thirty to forty pounds weight, and is very voracious. It devours crabs and shell fish, crushing them with its strong teeth. It is common on all the rocky inlets of the coast of New Holland, extending down the eastern shores to Sidney.

CHÆTODONTIDÆ.

No. 41.—*Chætodon sexfasciatus.* Richardson Ann. of Nat. Hist.—Native name *Kneloch.*

Inhabits rocky places. Not common.

No. 40.—*Chætodon.*—Native name *Mitchebuller* or *Metyebullar.* Teeth very minute.

Inhabits rocky places. Speared by Warrawar, on the 27th of May, 1841.

No. 27.2.—*Chætodon.*—Native name *Wamel* or *Wamle.* "Rays, D. 10-20; A. 3-17."

No. 6.—*Platax?*—Native names, *Teutuek* or *Karlock,* from the shape of the fins, also *Mudeur.* "Striped sweep" of the sealers, and Pomfret of the settlers. D. 10; A. 2. Teeth small. Very common on rocky shores. Is a gross feeder; but good to eat. Caught by a hook on the 12th of March, 1841.

No. 8.—*Pimelepterus? Melanichthys?*—Native names, *Kgnmmul* or *Karraway.* The striped zebra fish of the settlers. "Rays, D. 14-12; A. 3-11; V. 1-5." Mouth, small; tail rather concave.

Inhabits rocky shores, is a gross feeder, bad eating, and is not common. Caught by the hook on the 6th of April 1841.

No. 10.—*Pimelepterus? Melanichthys?* Schlegel.—

Native names, *Kowelany, Karraway;* or *Memon.* Tail a little forked. "Rays, D. 14-13; A. 3-11; P. 17; V. 1-5." Eye, grey.

Inhabits rocky shores, and is not very common. Caught by a hook, on the 6th of April, 1841.

No. 17.—*Melanichthys.*—Native name *Memon* or *Muddier.* "Rays, D. 14-13; A. 3-11; P. 17; V. 1-5."

Eye greyish yellow; teeth in a trenchant series on the edge of the upper and lower jaw, and also on the maxillaries. Is a gross feeder, and its flesh has a strong disagreeable smell, but is much relished by the Aborigines.

Inhabits rocky shores, and is rare. Caught by hook, 3rd May, 1841.

No. 33. Genus unknown.—Native name, *Toobetoet* or *Toobitoo-it.* Rays, D. 17-11; A. 11; P. 11; V. 4.

Is a rare inhabitant of rocky places. Speared by Mooriane, 14th of May, 1841. This seems to be a new generic form, nearly allied to *Hoplegnathus,* Richardson; or *Scarodon,* Schlegel.

No. 43.—*Scorpis?*—Native name, *Memon* or *Meemon.* "Sweep" of the sealers. "Rays, D. ; A. 1." Teeth minute. It is a gross feeder and poor eating. Very common on rocky shores. Being a bold voracious fish, it is easily speared or taken with a hook. The Aborigines generally select a rock which jutts out into the sea, and sitting on their hams, beat crabs into fragments with a little stone, and throw them into the sea to attract this fish. The instant a fish comes to feed on the bait, the native, whose spear is ready, suddenly darts it, and rarely fails in bringing up the fish on its barbed point. Specimen caught by the hook, 15th of June, 1841.

No. 44.—*Kurtus?*—Native name, *Telyua,* or *Tellya,* "Rays, D. 13; A. 2-19; V. 5."

Thrown up on Albany beach, 14th of August, 1841.

PLATESSIDÆ.

No. 50.—*Platessa ?* vel. *Hippoglossus ? chundela.*—Native name, *Chondelar*, or *Chundela*. The "Spotted sole" of the settlers. Very common in all the shallow bays in the summer time, where it may be taken by the seine. The natives detect it when its body is buried in the sand, by the glistening of its eyes, and spear it. When fishing with the torch, in the night time, the natives feel for this fish with their naked feet. Specimen caught by seine, August, 1841. This fish is delicate eating.

SCOMBERIDÆ.

No. 32.—*Caranx micans*, Solander, Icon. Parkinson, Bib. Banks, No. 89.—Native name, *Madawick*, "Skip-jack" of the settlers. "Rays, D. 8-28; A. 2-23; P. 15." Very common in shallow sandy bays, and forming the staple food of the natives, who assemble in fine calm days, and drive shoals of this fish into weirs that they have constructed of shrubs and branches of trees. Specimen caught by hook on the 12th of May, 1841.

No. 16. — *Trachurus lutescens.* Solander (*Scomber*) Pisces Austr. p. 38. Richard. Ann. Nat. Hist. x. p. 14.—Native name, *Wărăwite* and *Madiwick*. "Yellow tail" of the sealers. "Rays, D. 6; A. 2." Eye very large.

Inhabits the edges of sandy banks. Good eating. Caught by hook 5th of March, 1841.

MUGILIDÆ.

No. 29. *Mugil* vel. *Dajaus diemensis.* Richardson, Ichth. of the Erebus and Terror, p. 37, pl. 26, f. 1.—Native name, *Knamler* or *Knamaler*. "Common mullet" of the settlers. "Rays, D. 4-9; A. 1-13.

Frequents shores with sandy beaches, and forms a principal article of food to the native youths, who are continually practising throwing their spears at this fish. It is very

common, and is good eating. Caught by the seine, 12th April, 1841.

No. 57.—*Mugil.*—Native name, *Mĕrrŏng*, or *Mirrong*. "The flat-nosed mullet" of the settlers.

This is the finest fish of New Holland that I am acquainted with. In Wilson's Inlet, about forty miles west of King George's Sound, it abounds in the winter months; and the different tribes, from all parts of the coast, assemble there, by invitation of the proprietors of the ground, (the *Murrymin*,) who make great feasts on the occasion. The fish attains a weight of three and a-half pounds, and a fat one yields about three quarters of a pound of oil, which the natives use for greasing their heads and persons. This fish runs up the rivers during the floods, and so becomes very fat. In summer it retires to the ocean. Caught in September, 1841.

LABRIDÆ.

No. 47.—*Labrus laticlavius.* Richardson, Zool. Trans. 3. p. 139.—Native name, *Kanup*, or *Parill*, (Green-fish.)

Is a rare inhabitant of rocky shores. Caught by hook, 17th August, 1841. Poor eating.

No. 20.—*Labrus?*—Native name, *Knelmick, Kielmick*, or *Kielnmick*. "Rock-cod" of the sealers. "Rays, D. 22; A. 14."

Tail square. Very common on rocky coasts. Soft, indifferent eating. Caught by the hook, 3rd May, 1841.

No. 9.—*Labrus?*—Native name, *Paril*. "Common rock-fish of the sealers. "Rays, D. 9-11; A. 2-11, &c."

Mouth furnished with small sharp teeth. Caught by hook, 12th March, 1841.

No. 37.—*Labrus?*—Native name, *Paril, Kuhoul*, or *Bomburn*. "Black rock-fish" of the sealers. "Rays, D. 9-11; A. 3-10," &c.

Inhabits rocky shores, and grows to the size of fifteen or twenty pounds weight. Poor, soft eating. Speared by Warrawar, 12th May, 1841.

No. 7.—*Labrus?*—Native name, *Pokong*. "Brown rock-fish" of the sealers. "Rays, D. 9-12; A. 3-10," &c.

Flesh soft and poor. Inhabitants rocky shores; very common. Caught by hook, 12th March, 1841.

No. 18.—*Crenilabrus?*—Native name, *Knelmich*, *Miname*, or *Minamen*. Common "rock-fish" or "Parrot" of the sealers. "Rays, D. 8-11; A. 2-10," &c.

Poor and soft. Inhabits bold rocky shores, where it is troublesome to the fisher by carrying off his bait. Caught by hook, 3rd May, 1841.

No. 12.—*Labrus?*—Native name *Ianon't*, *Worogut*, or *Cumbeak*. "Rays, D. 30; A. 12." Tail rounded, teeth very small.

Inhabits weedy places in deep water, and along sandy bays. Sometimes taken by the natives on the edge of banks. Excellent eating. Caught by hook, 18th March, 1841.

No. 30.—*Cossyphus? Crenilabrus?*—Native name *Moolet* or *Chetŏn*. "Red rock-fish" of the settlers. "Rays, D. 11-10; A. 3-11; P. 15." &c.—Teeth very strong; tail rounded; its rays oblong.

Inhabits rocky shores. Bites eagerly, and is a gross feeder. Indifferent eating. Caught by hook, 6th April, 1841.

No. 35. ———? Genus not ascertained.—Native name *Koogenuck*, *Quejuimuck*, or *Knowl*. Little known to the sealers. "Rays, 11-12; A. 2 or 3; P. 16 or 18." Dorsal spines remarkable; scales large; grows to a large size; the flank scales of one weighing twenty-eight pounds, measure an inch and a half in length, and an inch and a quarter in breadth. (They are cycloid.—J. R.)

Inhabits rocky shores. The specimen was speared by *Warrawar*, 12th May, 1841.

CYPRINIDÆ.

No. 5.—*Rynchana Greyi.* Richardson, Ichth. of Voy. of Erebus and Terror, p. 44. pl. 29. f. 1. 6.—Native name, *Pining* or *Waunugur*, not certain. Not known to the sealers. Pupil like that of the shark elliptical, with the long axis vertical.

When the skin was removed the flesh was very fat, resembling that of the eel, had an unpleasant smell, and could not be eaten. The natives also were averse to eating it, and only one man acknowledged to have seen it before. Caught by seine, by Corporal Emms of the 51st regiment, 7th April, 1841. (This fish is also an inhabitant of Queen Charlotte's Sound, New Zealand.—J. R.)

SALMONIDÆ.

No. 48.—*Aulopus purpurissatus.* Richardson, Icones Piscium, p. 6, pl. 2, f. 3.—Native name, *Kardar.* "Rays, D. 19; A. 14; V. 9; P. 10."

Very rare. Caught by hook, on a rocky shore, by Mr. Sholl of Albany, 14th July, 1841. (Mr. Niell's figure differs slightly from that of Lieutenant Emery, published in the *Icones Piscium* above quoted, and chiefly in the dorsal occupying rather more space, by commencing before the ventrals, and extending back to opposite the beginning of the anal. The anus is under the fourteenth dorsal ray. Mr. Niell's drawing also shews a series of six large roseate spots on the sides below the lateral line, and a more depressed head, with a prominent arch at the orbit.—J. R.)

ESOCIDÆ.

No. 22.—*Hemiramphus.*—Native name, *Iimen.* "Guard-

fish" of the settlers. "Rays, D. 16, delicate black rays; A. 15, do.; P. 12; V. 6." Lower jaw equal to the head in length. Caught by the seine, 3rd March, 1841.

Inhabits sandy bays, but approaches the shore only in summer. It is very delicate eating.

MURÆNIDÆ.

No. 52.—*Muræna?* vel *Sphagebranchus*.—Native name *Kalet*. The eel figure, nat. size. Dorsal fin continuous for about three and a half inches behind the snout to the point of the tail: its rays very delicate; anal like the dorsal, but commencing behind the vent. One small lobe in the gills, about the size of a pin's head; no other perceptible opening.

Caught at the mouth of Oyster Harbour, 16th August, 1841.

LOPHOBRANCHI.

No. 56.— *Ostracian flavigaster*, Gray. Richardson, Zool. Trans. 3. p. 164, p. 11, f. 1.—Native name, *Conde* or *Koode*. "Rays, D. 10; A. 9; P. 11, &c."

This fish is not eaten by the natives, who abhor it. It is seen only in the summer, and in shallow sandy bays. Caught in a net in October, 1841.

No 51.— *Monacanthus*.— Native name, *Tabaduck*. Rays, D. 28; A. 26; P. 12; C. 12.

Very rare, scarcely ever seen by the Aborigines. Caught by hook, August, 1841.

No. 49.—*Monacanthus*.—Not known to the Aborigines. Rays, D. 32; A. 30; C. 12; P. 11. Eye yellow; dorsal spine short.

Taken in deep water by Mr. Johnson, off the Commissariat stores, near a sunken rock, in deep water.

No. 15.—*Monacanthus.*—Native name, *Caudiey.* "Small leather-jacket" of the sealers.

Inhabits deep water, with a rocky bottom; is good to eat. Caught by a net, 18th March, 1841. Dorsal spine toothed behind.

No. 31.—*Monacanthus*, or (*Aleuteres*, no spinous point of the pelvis visible in figure.—J. R.)—Native name, *Tabeduck.* The "yellow leather-jacket" of the sealers. Dorsal spine toothed. D. 33; A. 32; P. 13. Caudal rounded, its rays very strong.

Inhabits deep water in rocky places, and is very common. It is esteemed for food by the Aborigines; is much infested by an Isopode named *Nettong*, or *Toort*, by the natives. This insect inserts its whole body into a pocket by the side of the anus, separated from the gut by a thin membrane. The fish to which the insect adheres are yellow; those which are free from it are of a beautiful purple colour. Caught by hook, 12th May, 1841.

CARCHARIDÆ.

No. 54.—*Carcharias* (*Prionodon*) *melanopterus*, Muller and Henlè.—Native name, *Matchet.* "Common blue shark" of the settlers. Specimen four feet and a half long; have been seen longer. A female had four young alive when taken. Spiracles behind the eyes. Caught by hook, 16th August, 1841.

No. 26.—*Cestracion Philippi*, Mull. and Henlè.—Native names, *Mātchet*, *Korluck*, or *Quorluck.* "Bull-dog-shark" of the sealers. Specimen two feet and a half long.

Inhabits rocky shores, and is very sluggish; it does not grow to a very large size. Caught by hook, 6th April, 1841.

TRYGONES.

No. 38.—*Urolophus.*—Native name, *Kegetuck* or *Bebil.* "Young sting-ray" of the sealers. Caught by seine, 4th May, 1841.

No. 28.—Near *Platyrhina.*—Native name, *Parett.* "Fiddler" of the sealers; Green skate of the settlers. Eye dullish yellow; pupil sea-green, glaring in some lights; teeth transverse, like a file; spiracles two, large, behind the eye, in the same cavity; belly white, terminating at the caudal fin.

Very common in the sheltered bays, close in shore among the weeds. Not eaten by the Aborigines, who greatly abhor them, as they do also the sting-ray. Specimen two feet nine inches and a half long.

(D.)

DESCRIPTION AND FIGURES

OF FOUR NEW SPECIES OF AUSTRALIAN INSECTS.

By Adam White, Esq. M.E.S.

The four insects here figured and described are, as far as I am aware, new. Petasida, and Tettigarcta are interesting in the shape of the Thorax, differing widely from that in any of the allied genera, while the new species of Eurybrachys and Chrysopa are striking from their colouring and marks.

Petasida ephippigera, *pl.* 4. *fig.* 1.

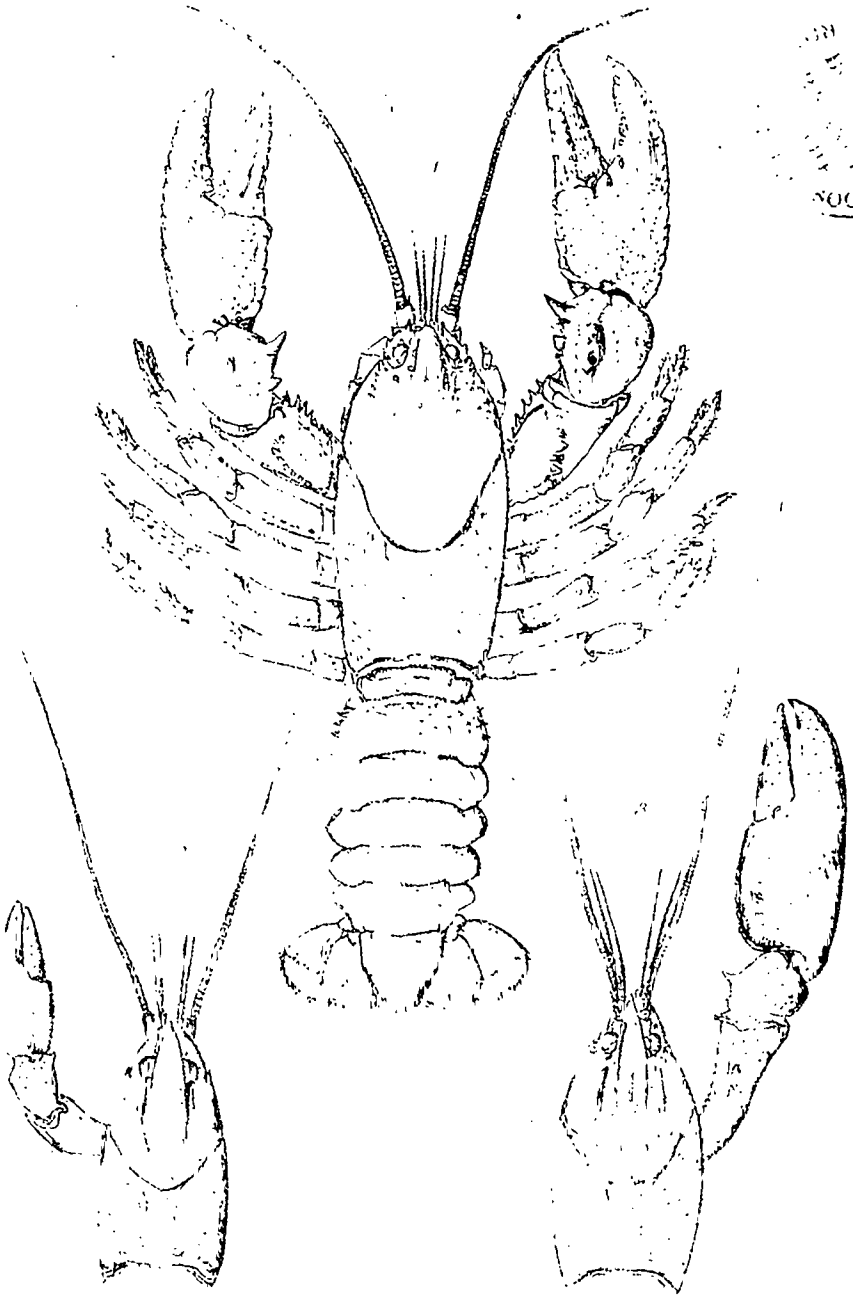
Thorax much dilated behind, depressed and rounded at the end; the side deeply sinuated behind; head pointed, antennæ long; of a yellowish orange; antennæ with a few greenish rings, cheek below the eye with a greenish line, head above with a longitudinal greenish line. Thorax with a slight keel down the middle, wrinkled behind of a dusky blueish green, a large patch of an orange colour on each side in front, and a small spot of the same colour on each edge of the produced part at base; elytra orange with numerous black spots, and black at the tip, lower wings pale orange at the base, clouded with black at the tip; abdomen orange, slightly ringed with green; legs orange, with three greenish spots on the outside of the femora of hind legs.

Length 1 inch 9 lines.

Hab. Australia.

Chrysopa maculipennis, *pl.* 4. *fig.* 2.

Head red, with a black spot on the crown; antennæ short brownish black; thorax hairy; thorax, abdomen, and legs, brownish black. Wings brown, with iridescent hues,



Hullmandel & Walton Lithographers

1. ASTACUS FRANKLINII.
2. BICARINATUS.
3. QUINQUECANNATUS

the upper with transverse yellowish lines and spots at the base; a long yellowish line parallel to the outer edge at the end, and emitting a whitish spot which reaches the edge, three spots on the apical portion, the two on the outer edge large; basal half lower wings pale, some of the areolets yellowish; a few clouded with brown, tip of the wing yellowish.

Expanse of wings 1 inch 4½ lines.

Hab. Australia.

EURYBRACHYS LÆTA, *pl.* 4, *fig.* 3.

Head thorax and upper wings of a rich brown colour, the outer edge of the last is deep black, with a transverse yellowish spot just before the middle, the remainder of the edge slightly spotted with black, upper side covered with short blackish hairs; lower wings deep black; abdomen of a bright red, with a round white tuft on the upper side near the end; first two pairs of legs of a deep brown, with some reddish lines; hind legs ferruginous with blackish spines.

Expanse of wings 7 lines.

Hab. Australia.

TETTIGARCTA, n. genus, *White*. Fam. CICADIDÆ.

Head very small in front, blunt; lateral ocelli close to the eyes, space between them with long hairs.

Prothorax very large, extending back in a rounded form beyond the base of hind wings, the sides sharp pointed, the back very convex and wrinkled.

Body and under parts densely clothed with hair.

This very singular genus differs from all the Stridulantes in the size and shape of the prothorax; in the neuration of the elytra it is allied to *Platypleura* (Amyst and Serville) in the size of head and hairiness of body it approaches *Carineta* of the same authors. The Pupa, (fig. 5.) differs in the form of fore legs from those of the other Cicada.

TETTIGARCTA TOMENTOSA, *pl.* 4, *fig.* 4, *and* 5 *its pupa.*

Of a brownish ash colour, the hairs on upper part of body short and deep brown, on the sides and under parts long and grey; prothorax varied with black, in front, two large patches covered with grey hairs, mixed with longer; elytra spotted and varied with brown, wings clear, somewhat ferruginous at the base.

Expanse of wings 3 inches 4 lines.

Hab. Australia.

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Plate 5.

Hullmandel & Walton Lithographers

1. THYRIDOPTERYX NIGRESCENS. 4. CH. FUSCINULA.
2. CALLIMORPHA SELENÆA. 5 ACONTIA? PULCHRA.
3. CHELONIA PALLIDA.

DESCRIPTION

OF

TWO NEW INVERTEBRATED ANIMALS FROM AUSTRALIA,

BY J. E. GRAY, ESQ., F.R.S.

LAMARCK separated the mother-of-pearls shell (*Margarita*) from the swallow-tail muscles (*Avicula*) on account of its more orbicular shape. Other Conchologists have been inclined to unite them, as some of the species of *Avicula* approach to the shape of the other genus. The new one just received from Australia, which I am now about to describe, in this respect more resembles the Margarita than any before noticed; yet I am inclined to think that the pearl-shells deserved to be kept separate, as the cardinal teeth are quite obliterated in the adult shells, which is not the case with any *Aviculæ* I am acquainted with; and the young pearl-shells are furnished with a broad serrated distant leafy fringe, while the *Aviculæ* are only covered with very closely applied short concentric slightly raised minutely denticulated lamina, forming an epidermal coat on the surface.

1. AVICULA LATA, *pl.* 6. *f.* 1.

Shell dark brown; half ovate; broad obliquely truncated, and scarcely notched behind; covered with close regular very thin denticulated concentric lamina, forming a paler external coat. The front ear rather produced, with a

distant inferior notch; internally pearly, with a broad brown margin on the lower edge.

Inhab. North and West coasts of Australia.

2. SPATANGUS ELONGATUS, *pl.* 6. *f.* 2.

Body elongate, cordate, with a deep anterior grove and notch; covered above with minute hair-like spines, with scattered very elongated tubular minutely striated spines on the sides; the anterior groves and circumference of the vent with larger equal hair-like spines on each side; the under surface with a triangular disk of similar spines beneath the vent, and with elongated larger tubular spines.

Inhab. Western Australia.

Having only a single specimen completely covered with spines, it is impossible to describe the form of the ambulacra or the disposition of the tubercles. The lower figures represent the mouth and vent of the animal in detail.

DESCRIPTION

OF SOME

NEW AUSTRALIAN LEPIDOPTEROUS INSECTS,

BY EDWARD DOUBLEDAY, ESQ., F.L.S., &c.

THYRIDOPTERYX NIGRESCENS, *pl. 5. f. 1.*

Head densely clothed with long whitish hairs; thorax and abdomen with black hairs; wings hyaline, the nervures and nervules brown, with a few black scales: base of the anterior and abdominal fold of the posterior more or less covered with black hairs; antennæ and legs fuscous brown.

Exp. 10—12 lines.

The larva of this species forms a dwelling for itself, similar in form and structure to that of its American congener, the *Ephemeræformis*, Steph.

CALLIMORPHA SELENÆA, *pl. 5. f. 2.*

Wings of a brilliant silvery white; the anterior traversed by a fulvous band commencing at the base on the costa, which it follows for about one-third of its length, then crossing the wings directly to the anal angle, where it unites with a vitta of the same colour, extending from the angle nearly to the base along the inner margin; this vitta is bordered interiorly with thickly placed black dots; the transverse portion of the fulvous band is bordered on both sides with black, and has a sinus about the middle; cilia fulvous; posterior wing with a black spot near the outer angle: below, the wings are white, except the cilia of the anterior, and a large blotch, red anteriorly, black posteriorly,

near the outer angle; head rufous; antennæ fuscous; thorax and abdomen white, the former with the shoulders rufous.

Exp. 2½ inches.

CHELONIA PALLIDA, *pl.* 5. *f.* 3.

Anterior wings pale brown, with white nervures and nervules, and marked with several whitish spots, of which four are on the costa, two longitudinal before, two transverse beyond the middle of the wing, and on the inner margin are three irregular patches, sometimes confluent, beyond which is a band parallel with the outer margin, commencing above the upper median nervule, and terminating on the inner margin; posterior wings white, with a discoidal spot, a macular band near the outer margin, and a less distinct marginal one, all brownish; head white; thorax white, with three black vittæ; abdomen above rufous, with six transverse black spots, the sides varied with black and white; antennæ black; femora red; tibiæ and tarsi black.

Exp. 2¼ inches.

CHELONIA FUSCINULA, *pl.* 5. *f.* 4.

Anterior wings fuscous, with a pale vitta commencing near the base on the subcostal nervure, reaching the costa before the middle, and extending along it to the apex, where it joins a flexuous submarginal band, connected with a vitta occupying the whole inner margin; beyond the cell is an abbreviated flexuous striga; followed by a subquadrate dot; posterior wings pale dull red, with a broad submarginal fuscous band, and a discoidal spot of the same colour; head and anterior part of thorax pale, posterior black; abdomen above red, with a black dorsal line; antennæ fuscous; femora red; tibiæ and tarsi fuscous.

Exp. 1¼ inch.

Hullmandel & Walton Lithographers

1. AVICULA LATA.
2. SPATANGUS ELONGATUS.

ACONTIA? PULCHRA, *pl. 5. f. 5.*

Wings of a somewhat chalky white, the anterior with three rufous dots on the costa before the middle, of which the third is the largest, and near the apex a large brown spot, fulvous towards the costa, clouded with bluish white, connected with the inner margin by four indistinct yellow dots; forehead red; head, thorax, and abdomen, white; palpi red at the apex; feet white first and second pairs spotted with red.

Exp. 2 inches.

LIST OF BIRDS,

KNOWN TO INHABIT SOUTHERN AUSTRALIA,

BY JOHN GOULD, ESQ. F.R.S.*

ORDER RAPTORES.

Aquila fucosa, *Cuv.*
Ichthyiaetus leucogaster, *Gould.*
Pandion leucocephalus, *Gould.*
Haliastur sphenurus.
Falco melanogenys, *Gould.*
—— sub-niger, *G. R. Gray.*
—— frontatus, *Gould.*
Ieracidea Occidentalis, *Gould.*
——— Berigora.
Tinnunculus Cenchroïdes.
Astur approximans, *Vig. & Horsf.*
—— Novæ-Hollandiæ, *Vig. & Horsf.?*
Accipiter torquatus, *Vig. & Horsf.*
Buteo melanosternon, *Gould.*
Milvus isurus, *Gould.*
——— affinis, *Gould.*
Elanus axillaris.
——— scripta, *Gould.*

* Lists of the birds inhabiting New South Wales and Western Australia, also by Mr. Gould, will be found in the works of Captain Grey, and the Count Strzelecki.

Circus assimilis, *Jard.*
—— Jardinii, *Gould.*
Strix personata, *Vig.*
—— delicatulis, *Gould.*
Athene connivens.
——— Boobook

Order INSESSORES.

Hirundo neoxena, *Gould.*
Cotyle pyrrhonota.
Acanthylis caudacuta.
Eurostopodus guttatus.
Podargus humeralis, *Vig. & Horsf.*
Ægotheles Novæ-Hollandiæ, *Vig. & Horsf.?*
Merops ornatus, *Lath.*
Dacelo gigas, *Bodd.*
Halcyon sanctus, *Vig. & Horsf.*
——— pyrrhopygia, *Gould.*
Alcyone azurea.
Falcunculus frontatus, *Vig. & Horsf.*
Oreoïca gutturalis.
Xerophila leucopsis, *Gould.*
Colluricincla cinerea, *Vig. & Horsf.?*
Pachycephala gutturalis, *Vig. & Horsf.*
———— inornata, *Gould.?*
———— pectoralis, *Vig. & Horsf.*
———— rufogularis, *Gould.*
Artamus sordidus.
——— personatus, *Gould.*
Cracticus destructor, *Temm.*
Gymnorhina leuconota, *Gould.*
Grallina melanoleuca, *Vieill.*
Strepera ———— ?

Campephaga humeralis, *Gould.?*
Graucalus melanops, *Vig. & Horsf.*
Cinclosoma punctatum, *Vig. & Horsf.*
——— castanotus, *Gould.*
Malurus cyaneus, *Vieill.*
——— melanotus, *Gould.*
——— leucopterus, *Quoy & Gaim.*
——— Lamberti, *Vig. & Horsf.*
Stipiturus malachurus, *Less.*
Cysticola exilis?
Hylacola pyrrhopygia.
——— cauta, *Gould.*
Acanthiza pusilla, *Vig. & Horsf.*
——— uropygialis, *Gould.*
——— inornata, *Gould.*
——— lineata, *Gould.*
——— chrysorrhœa.
Epthianura aurifrons, *Gould.*
——— tricolor, *Gould.*
Sericornis frontalis.
Pyrrholæmus brunneus, *Gould.*
Calamanthus campestris.
Anthus pallescens, *Vig. & Horsf.*
Cincloramphus cantillans, *Gould.*
Petroïca multicolor, *Swains.*
——— phœnicea, *Gould.*
——— Goodenovii, *Jard. & Selb.*
——— rosea, *Gould.*
——— bicolor, *Swains.*
Drymodes brunneopygia, *Gould.*
Zosterops dorsalis, *Vig. & Horsf.*
Pardalotus punctatus, *Temm.*
——— striatus, *Temm.*

Dicæum hirundinaceum.
Estrelda bella.
——— temporalis.
Amadina Lathami.
——— castanotus, *Gould.*
Rhipidura albiscapa, *Gould.*
——— Motacilloïdes.
Seisura volitans, *Vig. & Horsf.*
Micrœca macroptera, *Gould.*
Smicrornis brevirostris, *Gould.*
Corvus Coronoïdes, *Vig. & Horsf.*
Chlamydera maculata, *Gould.*
Corcorax leucopterus, *Less.*
Pomatorhinus trivirgatus, *Temm.*
——— temporalis, *Vig. & Horsf.*
Cacatua galerita, *Vieill.*
——— Leadbeateri.
Licmetis nasicus, *Wagl.*
Calyptorhynchus Banksii, *Vig. & Horsf.*
——— Leachii
——— xanthonotus, *Gould.*
Polytelis melanura.
Platycercus Baueri, *Vig. & Horsf.*
——— Barnardi, *Vig. & Horsf.*
——— Adelaidiæ, *Gould.*
——— flaveolus, *Gould.*
Psephotus multicolor.
——— hæmatonotus, *Gould.*
Melopsittacus undulatus.
Euphema aurantia, *Gould.*
——— elegans, *Gould.*
Pezoporus formosus.
Trichoglossus Swainsonii, *Jard. & Selb.*

Trichoglossus concinnus, *Vig. & Horsf.*
———— pusillus, *Vig. & Horsf.*
———— porphyrocephalus.
Climacteris scandens, *Temm.*
———— picumnus, *Temm.*
Sittella melanocephala, *Gould.*
Cuculus inornatus, *Vig. & Horsf.*
———— cineraceus, *Vig. & Horsf.*
Chalcites lucidus, *Vig. & Horsf.*
Meliphaga Novæ-Hollandiæ, *Vig. & Horsf.*
———— Australasiana, *Vig. & Horsf.*
Glyciphila fulvifrons, *Swains.*
———— albifrons, *Gould.*
———— ocularis, *Gould.*
Ptilotis sonora, *Gould.*
———— cratitia, *Gould.*
———— ornata, *Gould.*
———— penicillata, *Gould.*
Zanthomyza Phrygia, *Swains.*
Melicophila picata, *Gould.*
Acanthogenys rufogularis, *Gould.*
Anthochæra carunculata, *Vig. & Horsf.*
———— mellivora, *Vig. & Horsf.*
Acanthorynchus tenuirostris.
Melithreptus gularis, *Gould.*
———— lunulata, *Vieill.*
Myzantha garrula, *Vig. & Horsf.*

Order RASORES.

Phaps chalcoptera.
—— elegans.
Ocyphaps Lophotes.

Geopelia cuneata.
Dromeceius Novæ-Hollandiæ, *Vieill.*
Otis Australasianus, *Gould.*
Œdicnemus longipes, *Vieill.*
Hæmatopus fuliginosus, *Gould.*
———— longirostris, *Vieill.*
Eudromias Australis, *Gould.*
Lobivanellus lobatus.
Sarciophorus pectoralis.
Charadrius Virginianus?
Hiaticula monacha.
———— nigrifrons.
———— ruficapilla.
Erythrogonys cinctus, *Gould.*
Leipoa ocellata, *Gould.*
Pedionomus torquatus, *Gould.*
Turnix varius.
—— velox, *Gould.*
Coturnix pectoralis, *Gould.*
Synoicus Australis.
—— — Sinensis.

Order GRALLATORES.

Grus Antigone?
Platalea regia, *Gould.*
——— flavipes, *Gould.*
Ardea cinerea?
—— pacifica, *Lath.*
—— Novæ-Hollandiæ, *Lath.*
Nycticorax Caledonicus, *Less.*
Botaurus Australis, *Gould.*
Ibis Falcinellus, *Linn.*
Numenius Australasianus.

Numenius uropygialis, *Gould.*
Recurvirostra rubricollis, *Temm.*
Chladorhynchus pectoralis.
Himantopus leucocephalus, *Gould.*
Limosa ——?
Glottis Glottoïdes.
Pelidna ——? like *P. minuta.*
Scolopax Australis, *Lath.*
Rhynchæa Australis, *Gould.*
Porphyrio melanotus, *Temm.*
Tribonyx ventralis, *Gould.*
Gallinula immaculata.
Rallus Philipensis? *Linn.*

Order NATATORES.

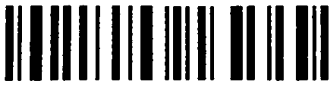
Cygnus atratus.
Anseranas melanoleuca.
Leptotarsis Eytoni, *Gould.*
Cereopsis Novæ-Hollandiæ, *Lath.*
Casarka Tadornoïdes.
Biziura lobata, *Shaw.*
Bernicla jubata.
Anas Novæ-Hollandiæ, *Lath.*
—— nævosa, *Gould.*
—— castanea.
Nyroca Australis, *Eyton.*
Rhynchapsis Rhynchotis, *Steph.*
Malacorhynchus membranaceus, *Swains.*
Podiceps Australis, *Gould.*
——— poliocephalus, *Jard. & Selb.*
——— gularis, *Gould.*
Phalacrocorax pica.
——— —— leucogaster, *Gould.*

Phalacrocorax sulcirostris.
——— melanoleucus.
Plotus Le Vaillantii ?
Pelecanus spectabilis, *Temm.*
Sula Australis, *Gould.*
Spheniscus minor.
Lestris catarrhactes.
Laras leucomelas.
Xema Jamesonii, *Wils.*
Sterna poliocerca, *Gould.*
——— velox, *Gould.*
Sternella nereis, *Gould.*
Hydrochelidon fluviatilis.
Diomedea exulans, *Linn.*
——— cauta, *Gould.*
——— melanophrys, *Temm.*
——— chlororhyncha, *Lath.*
——— fuliginosa.
Procellaria gigantea, *Gmel.*
——— perspicillata, *Gould.*
——— hasitata, *Forst.*
——— leucocephala.
——— Solandri, *Gould.*
Daption Capensis, *Steph.*
Prion vittata, *Cuv.*
——— Banksii.
——— Turtur.
——— Ariel, *Gould.*
Puffinus brevicaudus, *Gould.*
Puffinuria urinatrix, *Less.*
Thalassidroma Wilsoni.
——— nereis, *Gould.*
——— melanogaster, *Gould.*

The preceding list comprises the birds inhabiting the settled districts of South Australia: viz. the Murray, from the great bend to the sea, the fertile districts sixty miles northward and southward of Adelaide, Kangaroo Island, Port Lincoln, &c. When the remote parts of the colony have been explored, it will doubtless become necessary to add to it many other species common to New South Wales and Western Australia.—J. G.

END OF VOL. I.

G. NORMAN, PRINTER, MAIDEN LANE, COVENT GARDEN.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